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FILE COVERS 1997 - 13 Feb 2003 VOL 138 ISS 1
 FILE LAST UPDATED: 12 Feb 2003 (20030212/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d bib abs hitrn 17 1

17  ANSWER 1 OF 1  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:535163  HCAPLUS
DOCUMENT NUMBER: 133:143915
TITLE: Transcription factor E2F DNA-binding domain inhibitor
        peptides and uses thereof
INVENTOR(S): Muller, Rolf; Kontermann, Roland Ernst; Montigiani,
              Silvia
PATENT ASSIGNEE(S): Prolifix Limited, UK
SOURCE: PCT Int. Appl., 42 pp.
        CODEN: FIKXDI
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
  
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CA 2889143 AA 2-1-1983 IA 2-1-1983-2889143 2-1-1983

EP 1144437 A1 2-1-1983 EP 2-1-1983-1144437 2-1-1983

R: AT, BE, CH, DE, DK, ES, FR, GE, GR, IE, IT, JO, KC, NL, PT, SH, BF, BI, CF,
 LE, SI, IT, LV, FI, EC

US 2003013109 A1 2-1-2003 WO 2-1-2003-013109 2-1-2003

PRIORITY APPLN. INFO.: GB 1999-1710 A 19990126

WO 2000-GB227 W 20000126

OTHER SOURCE(S): MARPAT 133:145915

AB The present invention provides sequences of peptides which bind to the DNA binding domain of transcription factor E2F, and inhibit cell cycle progression. Peptides include FWLRFT, WWRWHF, WHFIFW, IWLGLSRGVWVSFP, and GSRILTFRSGSWYAS and derivs. based upon these sequences. Comps. and the use of the peptides in inhibiting cell cycle progression, such as in uncontrolled cell proliferation, are also provided.

IT 286839-16-5P

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
 peptide sequence; transcription factor E2F DNA-binding domain inhibitor peptides and uses thereof.

IT 286839-22-3 286839-23-4

RL: PRP (Properties)
 unclaimed sequence; transcription factor E2F DNA-binding domain inhibitor peptides and uses thereof)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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STRUCTURE FILE UPDATES: 12 FEB 2003 HIGHEST RN 469345-63-1
 DICTIONARY FILE UPDATES: 12 FEB 2003 HIGHEST RN 469395-63-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotest7.pdf>

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L8 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS
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 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 13: PN: W00044771 SEQID: 22 unclaimed sequence

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RN 286839-23-4 REGISTRY

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HITS AT: 1-6

REFERENCE 1: 133:145915

L8 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2003 ACS
 RN 286839-22-3 REGISTRY
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 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 12: PN: W00044771 SEQID: 21 unclaimed sequence

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RN 286839-22-3 REGISTRY

SEQ 1 WARWHF

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HITS AT: 1-6

REFERENCE 1: 133:145915

L8 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2003 ACS
 RN 286839-16-5 REGISTRY
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 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2: PN: W00044771 SEQID: 2 claimed sequence

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HITS AT: 1-6

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=> d bib abs hirm 111 1-26

L11 ANSWER 1 OF 26 HCAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2002:850304 HCAPLUS
 DOCUMENT NUMBER: 137:347570
 TITLE: Cloning and cDNA and deduced amino acid sequences of
 69 human proteins and their diagnostic and therapeutic
 uses
 INVENTOR(S): Ruker, Steven M.; Harash, Steven A.; Hahn, David A.;
 Birse, Charles A.
 PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 194 pp., Cont.-in-part of Appl.
 No. PCT/US01/01346.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 90
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002165137	A1	20021107	US 2001-860670	20010521
WO 2001055449	A1	20010802	WO 2001-US1346	20010117
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HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,				
LU, LV, MA, MD, MG, MK, MN, MW, MX, NC, NE, NL, NO, NZ, PA, PE,				
PD, PG, PH, PI, PK, PL, PT, RE, RO, RU, SD, SE, SG, SI, SK, SL,				
TM, TN, TR, TT, TZ, UA, UG, US, VE, VN,				
YU, ZA, ZW, AM, AZ, BY, KG, KE, MD, RO, TC, TM				
RW: GH, GM, KE, LS, MW, ME, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,				
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US 2002042096	A1	20020411	US 2001-764847	20010117
US 2002077270	A1	20020602	US 2001-764844	20010117
US 2002086811	A1	20020704	US 2001-764861	20010117
US 2002086820	A1	20020704	US 2001-764861	20010117
US 2002086821	A1	20020704	US 2001-764881	20010117
US 2002086822	A1	20020704	US 2001-764886	20010117
US 2002086823	A1	20020704	US 2001-764889	20010117
US 2002086830	A1	20020704	US 2001-764893	20010117
US 2002090615	A1	20020711	US 2001-764878	20010117
US 2002090674	A1	20020711	US 2001-764873	20010117
US 2002094353	A1	20020713	US 2001-764867	20010117
US 2002102635	A1	20020801	US 2001-764846	20010117
US 2002113913	A1	20020823	US 2001-764855	20010117
US 2002132777	A1	20020913	US 2001-764847	20010117
US 2002140714	A1	20021010	US 2001-764877	20010117

[illegible][illegible]

[illegible]

substitution frequencies compared to the genome as a whole. A large sample of *M. tuberculosis* clin. isolates was tested for a subset of the large-sequence and single-nucleotide polymorphisms and widespread genetic variability was found at many of these loci. Phylogenetic and epidemiol. anal. was carried out to investigate the evolutionary relationships among isolates and the origins of specific polymorphic loci. A no. of these polymorphisms appear to have occurred multiple times as independent events, suggesting that these changes may be under selective pressure. Together, these results demonstrate that polymorphisms among *M. tuberculosis* strains are more extensive than initially anticipated, and genetic variation may have an important role in disease pathogenesis and immunity. The sequence of the clin. strain CDC1551 of *M. tuberculosis* was deposited in GenBank/EMBL/DDBJ under accession no. AF000516, and the sequence of the genome of the *M. tuberculosis* lab. strain H37Rv was recently sequenced and deposited as NC_000962.

IT 457684-48-9

RL: ESU (Biological study, unclassified); PFI: Properties; PFI: (Biological study)

(amino acid sequence; whole-genome comparison of *Mycobacterium tuberculosis* clin. and lab. strains)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 3 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:545718 HCAPLUS

DOCUMENT NUMBER: 137:74287

TITLE: The genome of *Methanosarcina mazei*: evidence for lateral gene transfer between bacteria and Archaea

AUTHOR(S): Deppenmeier, Uwe; Johann, Andre; Hartsch, Thomas; Merkl, Rainer; Schmitz, Ruth A.; Martinez-Arias, Rosa; Henne, Anke; Wiezer, Arnim; Baumer, Sebastian; Jacobi, Carsten; Bruggemann, Holger; Lienard, Tanja; Christmann, Andreas; Focke, Mechthild; Steckel, Silke; Bhattacharyya, Anamitra; Lykidis, Athanasios; Overbeek, Ross; Klenk, Hans-Peter; Gunsalus, Robert E.; Fritz, Hans-Joachim; Gottschalk, Gerhard

CORPORATE SOURCE: Goettingen Genomics Laboratory. Department of General Microbiology. Institute of Microbiology and Genetics, Georg-August-University, Goettingen, D-37077, Germany

SOURCE: Journal of Molecular Microbiology and Biotechnology (2002), 4(4), 453-461

CASEN: JXMBFF; ISSN: 1464-1801

PUBLISHER: Horizon Scientific Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Archaeon *Methanosarcina mazei* and related species are of great ecol. importance as they are the only organisms fermenting acetate, methylamines and methanol to methane, carbon dioxide and ammonia (in case of methylamines). Since acetate is the precursor of 60% of the methane produced on earth these organisms contribute significantly to the prodn. of this greenhouse gas, e.g. in rice paddies. The 4,396,343 base pairs circular chromosome of *M. mazei* is more than twice as large as the genomes of the methanogenic Archaea currently completely sequenced. There were 3371 open reading frames (ORFs) identified. Based on currently available sequence data 376 of these ORFs are *Methanosarcina*-specific and 1043 ORFs find their closest homology in the bacterial domain. About 544 of these ORFs reach significant similarity values only in the bacterial domain. They include 46 of the 111 transposases, and proteins involved in: amino acid metabolism, protein synthesis, transport, cell division, environmental sensing, gene regulation, and stress response. Striking examples are the occurrence of the bacterial *hcr* and *hcs* superinfection system and the presence of tetrahydromethylethylamine-dependent enzymes. These findings might indicate that lateral gene transfer has played an important

evolutionary role in forming the physiol. of this metabolically versatile methanogen. The genome sequence is deposited in GenBank under Accession No. AE008644.

IT 440301-84-8

RL: BSU Biological study, unclassified; IFF Properties; BIDL Biological study

amino acid sequence; complete genome sequence of Methanosaeta thermophila and evidence for lateral gene transfer between bacteria and Archaea

REFERENCE COUNT: 19 THESE ARE THE ONLY REFERENCES AVAILABLE FOR THIS ENTRY. ALL CITATIONS AVAILABLE IN THE IF FORMAT

L11 ANSWER 4 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:348600 HCAPLUS

DOCUMENT NUMBER: 137:15993

TITLE: Human genome derived single exon nucleic acid probes useful for gene expression analysis

INVENTOR(S): Penn, Sharron Gaynor; Rank, David Russell; Chen, Wenshen; Hanzel, David Kagen

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 97 pp., Cont.-in-part of U.S. Ser. No. 774,203.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 84

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002048763	A1	20020425	US 2001-864761	20010523
GB 2360284	A1	20010919	GB 2000-24263	20001004
GB 2360284	B2	20020227		
GB 2361238	A1	20011017	GB 2001-15281	20001004
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US 2002081590	A1	20020627	US 2001-774203	20010129
WO 2001057270	A2	20010809	WO 2001-US661	20010130
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 US 2002102252 A1 20020811 US 2001-627998 20010406

PRIORITY APPLN. INFO.:

US 2000-180312P P 20000204
 US 2000-217486P P 20000816
 US 2000-60640P A1 20000630
 US 2000-632366 A2 20000803
 US 2000-234667P P 20000921
 US 2000-236359P P 20000927
 GB 2000-24263 A 20001004
 US 2001-774203 A2 20010129
 WO 2001-US661 A2 20010130
 WO 2001-US662 A2 20010130
 WO 2001-US663 A2 20010130
 WO 2001-US664 A2 20010130
 WO 2001-US665 A2 20010130
 WO 2001-US666 A2 20010130
 WO 2001-US667 A2 20010130
 WO 2001-US668 A2 20010130
 WO 2001-US669 A2 20010130
 WO 2001-US670 A2 20010130
 US 2001-160860P P 20010816

AB Methods and app. for predicting, confirming and displaying functional regions from genomic sequence data are used to identify 16,834 unique human genome-derived single exon probes useful for gene expression anal., particularly gene expression anal. by microarray. Also presented are genome-derived single exon microarrays that include such probes, peptides encoded by the exons, and antibodies thereto. The human genome-derived single-exon probes are known to be expressed in one or more human tissues or cell types, particularly human brain, heart, liver, fetal liver, placenta, lung, bone marrow, BT474 and other human mammary epithelial cells, HeLa and other human cervical epithelial cells, and HBL 100 and other human mammary epithelial cells. The invention provides a method of financing, selling and/or licensing genome-derived single-exon microarrays to customer desiring to measure gene expression, comprising: making available for computerized query or subscription service a database having a record corresponding to each genome-derived single exon microarray available for sale and/or license. [This abstr. record is one of ten records for this document necessitated by the large number of index entries required to fully index the document and published under special constraints.].

IT 437115-91-8

FI: BSU (Biological study, unclassified); FRF (Properties); BICL (Biological study)
 (amino acid sequence; human genome derived single exon nucleic acid probes useful for gene expression anal.)

111 ANSWER 5 OF 26 HCAPLUS COPYRIGHT 2003 ACC
 ACCESSION NUMBER: 111111111 HCAPLUS
 DOCUMENT NUMBER: 111111111
 TITLE: complete genome sequence of Methanosarcina acetivorans
 C2A reveals extensive metabolic and physiological
 diversity

AUTHOR :
 Nalapat, James P.; Nalapat, Chir; Ray, Allen;
 Endriani, Matthew S.; Marinova, Radoslava; Flanagan,
 Will; Calvo, Sarah; Engels, Reinhard; Smirnov, Serge;
 Atwood, Devon; Brown, Adam; Allen, Nicole; Naylor,
 Jerome; Spange-Thomann, Nicole; DeArellano, Kurt;
 Johnson, Robin; Linton, Lauren; McEwan, Paul;
 McKernan, Kevin; Talamas, Jessica; Tirrell, Andrea;
 Ye, Wenjuan; Zimmer, Andrew; Barber, Robert D.; Carr,
 Isaac; Graham, David E.; Grahame, David A.; Guss, Adam
 M.; Heiderich, Felner; Ingram-Smith, Cheryl; Kuettnr,
 H. Craig; Krzycki, Joseph A.; Leigh, John A.; Li,
 Weixi; Liu, Jinfeng; Mukhopadhyay, Biswarup; Reeve,
 John N.; Smith, Kerry; Springer, Timothy A.; Umayam,
 Lowell A.; White, Owen; White, Robert H.; de Macario,
 Everly Conway; Ferry, James G.; Jarrell, Ken F.; Jing,
 Hua; Macario, Alberto J. L.; Paulsen, Ian; Pritchett,
 Matthew; Sowers, Kevin B.; Swanson, Ronald W.; Tindler,
 Steven H.; Lander, Eric; McCall, William W.; Wilson,
 Bruce

CORPORATE SOURCE: Whitehead Institute Center for Genome Research,
 Cambridge, MA, 02141, USA

SOURCE: Genome Research (2002), 12(4), 532-542

CODEN: GEREFS; ISSN: 1088-9051

PUBLISHER: Cold Spring Harbor Laboratory Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Methanogenesis, the biol. prodn. of methane, plays a pivotal role in the
 global carbon cycle and contributes significantly to global warming. The
 majority of methane in nature is derived from acetate. The complete
 genome sequence of an acetate-utilizing methanogen, *Methanosarcina*
acetivorans C2A, is now reported. *Methanosarcineae* are the most
 metabolically diverse methanogens, thrive in a broad range of
 environments, and are unique among the Archaea in forming complex
 multicellular structures. This diversity is reflected in the genome of *M.*
acetivorans. At 5,751,492 base pairs it is by far the largest known
 archaeal genome. The 4524 open reading frames code for a strikingly wide
 and unanticipated variety of metabolic and cellular capabilities. The
 presence of novel methyltransferases indicates the likelihood of
 undiscovered natural energy sources for methanogenesis, whereas the
 presence of single-subunit carbon monoxide dehydrogenases raises the
 possibility of nonmethanogenic growth. Although motility has not been
 obsd. in any *Methanosarcineae*, a flagellin gene cluster and two complete
 chemotaxis gene clusters were identified. The availability of genetic
 methods, coupled with its physiol. and metabolic diversity, makes *M.*
acetivorans a powerful model organism for the study of archaeal biol. The
 genome sequence is deposited in GenBank under Accession No.
 AE010656-AE011189.

IT 406874-66-6

RL: BSU (Biological study, unclassified); FRP (Properties); BIOL
 (Biological study)

(amino acid sequence; complete genome sequence of *Methanosarcina*
acetivorans C2A reveals extensive metabolic and physiol. diversity)

REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

111 ANSWER 6 OF 26 HCAPLUS COPYRIGHT 2003 ADS

ACCESSION NUMBER: 2002:280980 HCAPLUS

DOCUMENT NUMBER: 137:16642

TITLE: Functional annotation of a full-length Archaeal
 genome collection

AUTHOR :
 Jahn, M. R.; Nalapat, Chir; Ferry, James G.; Jing,
 Hua; Calvo, Sarah; Engels, Reinhard; Smirnov, Serge;
 Atwood, Devon; Brown, Adam; Allen, Nicole; Naylor,
 Jerome; Spange-Thomann, Nicole; DeArellano, Kurt;
 Johnson, Robin; Linton, Lauren; McEwan, Paul;
 McKernan, Kevin; Talamas, Jessica; Tirrell, Andrea;
 Ye, Wenjuan; Zimmer, Andrew; Barber, Robert D.; Carr,
 Isaac; Graham, David E.; Grahame, David A.; Guss, Adam
 M.; Heiderich, Felner; Ingram-Smith, Cheryl; Kuettnr,
 H. Craig; Krzycki, Joseph A.; Leigh, John A.; Li,
 Weixi; Liu, Jinfeng; Mukhopadhyay, Biswarup; Reeve,
 John N.; Smith, Kerry; Springer, Timothy A.; Umayam,
 Lowell A.; White, Owen; White, Robert H.; de Macario,
 Everly Conway; Ferry, James G.; Jarrell, Ken F.; Jing,
 Hua; Macario, Alberto J. L.; Paulsen, Ian; Pritchett,
 Matthew; Sowers, Kevin B.; Swanson, Ronald W.; Tindler,
 Steven H.; Lander, Eric; McCall, William W.; Wilson,
 Bruce

Muramatsu, Masami; Hayashizaki, Yoshihide; Kawai, Jun;
Carninci, Piero; Itoh, Masayoshi; Ishii, Yoshiyuki;
Arakawa, Takahiro; Shibata, Mamoru; Chinagawa,
Akira; Shimizu, Masuo

CORPORATE SOURCE:

Plant Mutation Exploration Team, Plant Functional
Genomics Res. Group, RIKEN Genomic Sciences Center
1-1-1 Hiyaori, Tsukuba, 305-3858, Japan

SOURCE:

Science, Washington, DC, United States, 2002,
296:8860, 141-145

CODEN: SCIN; ISSN: 0036-8075

PUBLISHER:

American Association for the Advancement of Science

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB Full-length cDNAs are essential for the correct annotation of genomic sequences and for the functional anal. of genes and their products. About 155,144 RIKEN Arabidopsis full-length (RAFL) cDNA clones were isolated. The 3'-end expressed sequence tags (ESTs) of 155,144 RAFL cDNAs were clustered into 14,668 nonredundant cDNA groups, about 60% of predicted genes. 5'-ESTs were also obtained from 14,934 nonredundant cDNA groups and a promoter database constructed. The sequence database of the RAFL cDNAs is useful for promoter anal. and correct annotation of predicted transcription units and gene products. Furthermore, the full-length cDNAs are useful resources for analyses of the expression profiles, functions, and structures of plant proteins. [This abstr. record is one of sixteen records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 437141-30-5

RL: BSU (Biological study, unclassified); PPP (Properties); H1 (1)

Biological study

(amino acid sequence; functional annotation of a full-length

Arabidopsis cDNA collection.)

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:173787 HCAPLUS

DOCUMENT NUMBER: 136:351357

TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human adult liver

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

SOURCE: PCI Int. Appl., 658 pp.

CODEN: PEXXDL

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 84

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001057273	A2	20010504	WO 2001-057273	20010504
W:	AE, AG, AL, AM, AT, AU, AV, BA, BB, BC, BR, BY, BE, CA, CH, CN, CR, CU, DE, DK, DM, DO, EE, EG, FI, GB, GI, GR, HE, HM, HR, HU, ID, IL, IN, IS, IT, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MO, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AL, BY, BG, BR, BS, CA, CH, CN, CU, CY, EE, EG, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, BF, BJ, BF, BG, BI, BR, CA, CN, CR, CU, DE, DK, DM, DO, EE, EG, FI, GB, GI, GR, HE, HM, HR, HU, ID, IL, IN, IS, IT, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MO, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
BR:	GH, GN, KE, LS, ME, MD, SD, SL, SE, TE, UG, ZW, AT, BE, CH, CY, DE, DK, EG, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, BF, BJ, BF, BG, BI, BR, CA, CN, CR, CU, DE, DK, DM, DO, EE, EG, FI, GB, GI, GR, HE, HM, HR, HU, ID, IL, IN, IS, IT, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MO, MX, MY, NZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
GB 2361894	A1	2001 01 03	GB 2361894	2001 01 03

GB 2361234 AL 20110117 GB 2361235 20001004
 GB 2361236 BE 20120306
 WO 2001087573 AL 20110409 WO 2001-US664 20010130

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CR, CU, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GR, HR,
 HU, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
 LU, LV, MA, MD, ME, MK, MN, MX, MY, NZ, PA, PE, PG, PH, PI,
 PL, PT, QA, SE, SI, SK, SL, TR, TT, TZ, UA, UG, US, UZ, VN,
 YU, ZA, ZW, AM, AR, AT, AU, BA, BB, BC, BF, BG, BR, BY, CA,
 CH, CN, CU, DE, DK, ES, FI, FR, GB, GR, IE, IL, IN, MC, NL, PT, SE, TR, BF,
 BG, CH, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2001/011711 AL 20110117 US 2001-15261 20001004
 PRIORITY APPLN. INFO.:
 US 2001-15261 P 20001004
 US 2001-15261 P 20001004
 US 2001-15261 A 20001004
 US 2001-15261 A 20001004
 US 2000-234687P P 20000921
 US 2000-236359P P 20000927
 GB 2000-24263 A 20001004
 WO 2001-US664 A 20010130

AB A single exon nucleic acid microarray comprising 13,109 single exon nucleic acid probes for measuring gene expression in a sample derived from human adult liver is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human adult liver cells. Also described are 12,886 single exon nucleic acid probes and 12,583 proteins expressed in the adult liver and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In sum, methods are provided for identifying exons in a sample, determining which exons are assigned to a single gene.

IT 420924-39-6

RL: ANT (Analyte); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human adult liver)

111 ANSWER 8 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:157787 HCAPLUS

DOCUMENT NUMBER: 136:196341

TITLE: Cloning and cDNA and deduced amino acid sequences of 21 human secreted proteins

INVENTOR(S): Rosen, Craig A.; Komatsoulis, George A.; Baker, Kevin P.; Birse, Charles E.; Soppet, Daniel R.; Olsen, Henrik S.; Moore, Paul A.; Wei, Bing; Flier, Richard; Fan, J. Funder, Jui, Yuhui; Li, H. H.; Biscaglia, Michele; NI, Jian

PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA

SOURCE: PCT Int. Appl., 184 pp.

CODEN: PXXXX

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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[illegible][illegible]

770 4001-5000 5001-6000 6001-7000 7001-8000 8001-9000 9001-10000

400696-91-5P

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2002:125123 HCARLUS

DOCUMENT NUMBER: 1501440000

NAME: Genomic sequence of the plant pathogen *Ralstonia solanaceae* strain

AUTHOR(S): Salanoubat, M.; Genin, S.; Artiguenave, F.; Gouzy, J.; Mangenot, S.; Ariat, M.; Billault, A.; Brottier, P.; Camus, J. C.; Cattolico, L.; Chandler, M.; Choisine, N.; Claudel-Renard, C.; Cunnac, S.; Demange, N.; Gaspin, C.; Iavie, M.; Moisan, A.; Robert, C.; Saurin, F.; Schiex, T.; Sigler, F.; Thebaud, F.; Whalen, M.; Winkler, T.; Levy, M.; Winkler, T.; Winkler, T.; Winkler, T.

[illegible]

PUBLISHED BY: THE UNIVERSITY OF CHICAGO PRESS

DOCUMENT TYPE: Journal

LANGUAGE: English

[illegible]

[illegible]

394342-70-2 394342-96-2

Alt. ESN Biological study, unpublished; ESN (Experiments); ESN
"Biological study"

amino acid sequence; genome sequence of the plant pathogen *Ralstonia solanacearum*

RE
CO
CONFIDENTIAL

- 1 -

REF ID: A66087

REPORT: ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

Table 1. *Salmonella* serotypes and their associated diseases. *Salmonella* serotypes are classified into four groups: *S. flexneri*, *S. flexneri*, *S. flexneri*, and *S. flexneri*. The table lists the serotypes and their associated diseases.

1. *Pharmaceutical industry* – The pharmaceutical industry is a major contributor to the economy of the United States. It is a highly competitive industry with a high barrier to entry. The industry is characterized by a high level of research and development (R&D) spending, which is necessary to develop new drugs. The industry is also characterized by a high level of marketing spending, which is necessary to promote new drugs. The industry is a major source of employment in the United States.

DOCUMENT NUMBER: 100-441633

TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human placenta

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
Bark, David B.

PATENT ASSIGNMENT(S) : Molecular Dynamics, Inc., USA

Source: FBI Inv. 44-38861, Ser. 1, Vol. 1, p. 10.

CODEN: F1XYD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 84

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.		DATE
WO 2001057272		A2	20010609	WO 2001-XF666		20010609
W:	AE, AG, AI, AM, AT, AU, AZ, BA, BB, BG, BR, BF, BE, CA, CH, CN,					
	CR, CU, CZ, DE, DK, DM, DZ, EE, FI, GB, GD, GE, GH, GR, HR, HU,					
	ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,					
	LV, MA, MD, MG, MK, MN, MX, ME, NZ, NO, NI, PL, PT, PE, RU, SC,					
	SE, SG, SI, SK, SL, TC, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,					
	ZA, ZN, AM, AZ, BT, BO, BR, BU, BV, BW, BY, BZ, CA, CC, CD, CF,					
RW:	GH, GM, KE, LS, MW, MZ, SD, SI, SL, SZ, TE, TG, TN, TR, BF, CH, CY,					
	CE, CN, EG, FI, FR, GE, GR, HU, IL, IN, IR, IS, IT, KE, KR, LB, LI,					
	LU, MC, MD, ME, MG, MI, MN, MU, MV, MY, NA, NG, NI, NL, NO, NZ, OM,					
	PA, PE, PG, PH, PK, PL, PT, QA, RO, RU, RW, SA, SC, SD, SE, SG, SH,					
	SI, SK, SL, SM, SN, SO, SR, SS, ST, SU, SV, SW, SY, SZ, TD, TF, TG,					
	TH, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.					

GB 2360284 A1 20010919 GB 2000-24263 20001004

GU 2360204 B2 20020227

GB 2361238 A1 20011017 GB 2001-15281 20001094

(1) \mathcal{C}_1 \mathcal{C}_2 \mathcal{C}_3 \mathcal{C}_4 \mathcal{C}_5 \mathcal{C}_6 \mathcal{C}_7 \mathcal{C}_8 \mathcal{C}_9 \mathcal{C}_{10} \mathcal{C}_{11} \mathcal{C}_{12} \mathcal{C}_{13} \mathcal{C}_{14} \mathcal{C}_{15} \mathcal{C}_{16} \mathcal{C}_{17} \mathcal{C}_{18} \mathcal{C}_{19} \mathcal{C}_{20} \mathcal{C}_{21} \mathcal{C}_{22} \mathcal{C}_{23} \mathcal{C}_{24} \mathcal{C}_{25} \mathcal{C}_{26} \mathcal{C}_{27} \mathcal{C}_{28} \mathcal{C}_{29} \mathcal{C}_{30} \mathcal{C}_{31} \mathcal{C}_{32} \mathcal{C}_{33} \mathcal{C}_{34} \mathcal{C}_{35} \mathcal{C}_{36} \mathcal{C}_{37} \mathcal{C}_{38} \mathcal{C}_{39} \mathcal{C}_{40} \mathcal{C}_{41} \mathcal{C}_{42} \mathcal{C}_{43} \mathcal{C}_{44} \mathcal{C}_{45} \mathcal{C}_{46} \mathcal{C}_{47} \mathcal{C}_{48} \mathcal{C}_{49} \mathcal{C}_{50} \mathcal{C}_{51} \mathcal{C}_{52} \mathcal{C}_{53} \mathcal{C}_{54} \mathcal{C}_{55} \mathcal{C}_{56} \mathcal{C}_{57} \mathcal{C}_{58} \mathcal{C}_{59} \mathcal{C}_{60} \mathcal{C}_{61} \mathcal{C}_{62} \mathcal{C}_{63} \mathcal{C}_{64} \mathcal{C}_{65} \mathcal{C}_{66} \mathcal{C}_{67} \mathcal{C}_{68} \mathcal{C}_{69} \mathcal{C}_{70} \mathcal{C}_{71} \mathcal{C}_{72} \mathcal{C}_{73} \mathcal{C}_{74} \mathcal{C}_{75} \mathcal{C}_{76} \mathcal{C}_{77} \mathcal{C}_{78} \mathcal{C}_{79} \mathcal{C}_{80} \mathcal{C}_{81} \mathcal{C}_{82} \mathcal{C}_{83} \mathcal{C}_{84} \mathcal{C}_{85} \mathcal{C}_{86} \mathcal{C}_{87} \mathcal{C}_{88} \mathcal{C}_{89} \mathcal{C}_{90} \mathcal{C}_{91} \mathcal{C}_{92} \mathcal{C}_{93} \mathcal{C}_{94} \mathcal{C}_{95} \mathcal{C}_{96} \mathcal{C}_{97} \mathcal{C}_{98} \mathcal{C}_{99} \mathcal{C}_{100}

NO 2001057272 A2 20010809 NO 2001-US663 20010132

FOI b7(D) b7(C) b7(E)

[illegible]

35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																			
100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200

[illegible]

1. *Pharmaceutical industry* – The pharmaceutical industry is a major source of funding for research in the field of aging. The industry has a vested interest in developing new drugs and treatments for age-related diseases, and it often funds research that is likely to lead to the development of such products.

1. *Phragmites* (common in the marshes of the lower Mississippi River and in the coastal marshes of the Gulf of Mexico).

1. *Chlorophyll a* (Chl *a*)
 2. *Chlorophyll b* (Chl *b*)
 3. *Chlorophyll c* (Chl *c*)
 4. *Chlorophyll d* (Chl *d*)
 5. *Chlorophyll e* (Chl *e*)
 6. *Chlorophyll f* (Chl *f*)
 7. *Chlorophyll g* (Chl *g*)
 8. *Chlorophyll h* (Chl *h*)
 9. *Chlorophyll i* (Chl *i*)
 10. *Chlorophyll j* (Chl *j*)
 11. *Chlorophyll k* (Chl *k*)
 12. *Chlorophyll l* (Chl *l*)
 13. *Chlorophyll m* (Chl *m*)
 14. *Chlorophyll n* (Chl *n*)
 15. *Chlorophyll o* (Chl *o*)
 16. *Chlorophyll p* (Chl *p*)
 17. *Chlorophyll q* (Chl *q*)
 18. *Chlorophyll r* (Chl *r*)
 19. *Chlorophyll s* (Chl *s*)
 20. *Chlorophyll t* (Chl *t*)
 21. *Chlorophyll u* (Chl *u*)
 22. *Chlorophyll v* (Chl *v*)
 23. *Chlorophyll w* (Chl *w*)
 24. *Chlorophyll x* (Chl *x*)
 25. *Chlorophyll y* (Chl *y*)
 26. *Chlorophyll z* (Chl *z*)
 27. *Chlorophyll aa* (Chl *aa*)
 28. *Chlorophyll ab* (Chl *ab*)
 29. *Chlorophyll ac* (Chl *ac*)
 30. *Chlorophyll ad* (Chl *ad*)
 31. *Chlorophyll ae* (Chl *ae*)
 32. *Chlorophyll af* (Chl *af*)
 33. *Chlorophyll ag* (Chl *ag*)
 34. *Chlorophyll ah* (Chl *ah*)
 35. *Chlorophyll ai* (Chl *ai*)
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 70. *Chlorophyll arz* (Chl *arz*)
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 73. *Chlorophyll auz* (Chl *auz*)
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[illegible]

HE 11-1446 A 11-114
WO 2001-07668 A 20010130

AB A single exon nucleic acid microarray comprising 13,131 single exon nucleic acid probes for measuring gene expression in a sample derived from human placenta cells is described. These unique exons are within 1,000 probe sequences; sequencing confirms the exact exon structure of each probe. Some amplification reactions between the exon and the probe are contained in more than one amplification. Expression, function, and functional information are provided for the genome-derived single exon probes that are expressed significantly in human placenta. Also described are 13,131 single exon nucleic acid probes and 12,603 proteins expressed in the placenta cells and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addition, methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 400664-75-7

FL: ANT (Analytical); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); ELOL (Biological study)

(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human placenta)

111 ANSWER 11 OF 14 HEADLINE COPYRIGHT 11-114

ACCESSION NUMBER: 2002:1116 e HEADLINE

DOCUMENT NUMBER: 136:198168

TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human fetal liver

INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.

PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA

SOURCE: ECT Int. Appl., 639 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 84

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200107668	A2	20010130	WO 2001-07668	20010130
W:	AE, AG, AL, AM, AT, AS, AU, BA, BB, BG, BR, BY, BE, CA, CH, CN, CR, CU, CL, DE, DK, DM, DO, EE, ES, FI, FR, GB, GR, GU, HK, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, ME, NO, NI, NL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TK, TR, TT, TL, UA, US, VS, VT, WN, YT, ZA, ZN, AM, AN, AP, AY, AS, AU, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BR, BS, BT, BU, BV, BW, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CK, CL, CM, CN, CO, CR, CS, CU, CV, CZ, DA, DB, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DR, DS, DT, DU, DV, DW, DX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GH, GI, GJ, GK, GL, GM, GN, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ			
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WO 200107668	A1	20010130	WO 2001-07668	20010130
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 BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TS
 US 2001012251 A1 20010101 US 2001-827996 20010406
 PRIORITY APPLN. INFO.:

US 2000-181312P F 20000204
 US 2000-207456P F 20000516
 US 2000-608408 A 20000630
 US 2000-632366 A 20000603
 US 2000-234687P F 20000921
 US 2000-234372P F 20000921
 US 2000-234408 A 20000921
 US 2000-234408 A 20000921

AB A single exon nucleic acid microarray comprising 12,456 single exon
 nucleic acid probes for measuring gene expression in a sample derived from
 human fetal liver cells is described. These unique exons are within
 longer probe sequences; sequencing confirms the exact chem. structure of
 each probe. Some amplicons have more than one exon, and some exons are
 contained in more than one amplicon. Expression, homol., and functional
 information are provided for the genome-derived single exon probes that
 are expressed significantly in human fetal liver cells. Also described
 are 12,456 single exon nucleic acid probes and 12,927 proteins expressed
 in the fetal liver and their use in methods for detecting gene expression.
 The genome-derived single exon nucleic acids comprise a novel type of
 nucleic acid microarray for verifying gene expression. In addn., methods
 are provided for identifying exons in a eukaryotic genome, and for
 assigning exons to a single gene. [This abstr. record is one of nine
 records for this document necessitated by the large no. of index entries
 required to fully index the document and publication system constraints.].

IT 400957-73-5

RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties);
 ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid
 probes useful for anal. of gene expression in human fetal liver)

111 ANSWER 12 OF 26 HCAPLUS COPYRIGHT 2001 ACP

ACCESSION NUMBER: 2001012251 HCAPLUS
 DOCUMENT NUMBER: 1001012251
 TITLE: Human genome-derived single exon nucleic acid probes
 useful for analysis of gene expression in human brain
 INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng;
 Rank, David R.
 PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA
 SOURCE: PCT Int. Appl., 650 pp.
 COPEN: P1XXP2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 64
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001057275	A2	20010609	WO 2001-XF067	20010101
W:	AE, AG, AL, AM, AT, AU, BA, BB, BE, BF, BY, BG, CA, CH, CN,			
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BR:	BR, BK, BE, BL, BW, ME, SL, AL, CL, TL, CS, BK, AT, BE, CH, CY,			
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SE 2001012251	A1	20010101	SE 2001-4003	20010101
SE 2001012251	A1	20010101	SE 2001-4003	20010101

SE 2361238 A1 20011210 SE 2361238 A1 20011210
 SE 2361238 P1 20011210 SE 2361238 P1 20011210
 WO 2001037278 A1 20011210 WO 2001037278 A1 20011210
 SE 2361238 A1 20011210 SE 2361238 A1 20011210

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AB A single exon nucleic acid microarray comprising 12,621 single exon nucleic acid probes for measuring gene expression in a sample derived from human brain cells is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human brain. Also described are 12,613 single exon nucleic acid probes and 12,677 proteins expressed in the brain and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

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RL: ANT (Analyte); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study)
 (amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human brain)

111 ANSWER 13 OF 26 HCAPLUS COPYRIGHT 1994 ADP

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 TITLE: Human genome-derived single exon nucleic acid probes useful for analysis of gene expression in human bone marrow
 INVENTOR(S): Penn, Sharron G.; Hanzel, David K.; Chen, Wensheng; Rank, David R.
 PATENT ASSIGNEE(S): Molecular Dynamics, Inc., USA
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WO 2001057278 A1 20011112 W 2001-10041 2001004
WO 2001057278 A2 20020227

W: AB, AG, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, EI, CF, CG, CI, CK, GA, GN, GK, ML, MR, NE, SN, TD, TG

US 2001057278 A1 20011112 US 2001-057278 20010406

PRIORITY APPLN. INFO.:

US 2000-180312P P 20000204
US 2000-207456P P 20000526
US 2000-608408 A 20000630
US 2000-632366 A 20000803
US 2000-234687P P 20000921
US 2000-236359P P 20000927
GB 2000-24263 A 20001004
WO 2001-057278 A 20010406

AB A single exon nucleic acid microarray comprising 12,114 single exon nucleic acid probes for measuring gene expression in a sample derived from human bone marrow is described. These unique exons are within longer probe sequences; sequencing confirms the exact chem. structure of each probe. Some amplicons have more than one exon, and some exons are contained in more than one amplicon. Expression, homol., and functional information are provided for the genome-derived single exon probes that are expressed significantly in human bone marrow. Also described are 12,398 single exon nucleic acid probes and 12,616 proteins expressed in the bone marrow and their use in methods for detecting gene expression. The genome-derived single exon nucleic acids comprise a novel type of nucleic acid microarray for verifying gene expression. In addn., methods are provided for identifying exons in a eukaryotic genome, and for assigning exons to a single gene. [This abstr. record is one of nine records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 402671-83-4

RL: ANT (Analytical); BSL (Biological study, unclassified); FFI (Properties); ANST (Analytical study); BSL (Biological study)
(amino acid sequence; human genome-derived single exon nucleic acid probes useful for anal. of gene expression in human bone marrow)

III ANSWER 14 OF 26 REPAIRS COPYRIGHT 2000 APP

ACCESSION NUMBER: 20010406

DOCUMENT NUMBER: 20010406

TITLE: Human nucleic acids and their encoded proteins and antibodies

INVENTOR S: Rosen, David A.; Parash, Steven L.; Rubin, Steven M.

PATENT ASSIGNMENT :
DATE OF:

DOCUMENT ID:
COPIES IN:
INSTRUMENTS:
RECORDING OFFICE:
RECORDING DATE:

RECORDING OFFICE: BUREAU OF PATENTS, U.S. DEPT. OF COMMERCE
DATE OF RECORDING: 1960-07-15

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099
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AT	2001041413	A5	20010807	AT	2001-41413	20010117
AU	2001041416	A5	20010807	AT	2001-41416	20010117
AU	2001041417	A5	20010807	AT	2001-41417	20010117
AC	2001050770	A5	20010807	AT	2001-50770	20010117
US	2002042096	A1	20020411	US	2001-764887	20010117
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US	2002086823	A1	20020704	US	2001-764889	20010117
US	2002086330	A1	20020704	US	2001-764893	20010117
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US	2002132767	A1	20020919	US	2001-764847	20010117
US	2002147140	A1	20021010	US	2001-764877	20010117
US	2002151479	A1	20021017	US	2001-764873	20010117
US	2002161208	A1	20021031	US	2001-764884	20010117
US	2002164685	A1	20021107	US	2001-764857	20010117
US	2002173454	A1	20021121	US	2001-764904	20010117
EF	1261703	A1	20021204	EF	2001-912055	20010117

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PRIORITY APPL. INFO.:

[The page contains faint, illegible markings.]

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US 2000-249248P F 20001117
 US 2000-249264P F 20001117
 US 2000-249265P F 20001117
 US 2000-249297P F 20001117
 US 2000-249299P F 20001117
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 US 2000-249301P F 20001117
 US 2000-249302P F 20001117
 US 2000-249303P F 20001117
 US 2000-249304P F 20001117
 US 2000-249305P F 20001117
 US 2000-251988P F 20011205
 US 2000-256719P F 20001205
 US 2000-251479P F 20001206
 US 2000-251856P F 20001208
 US 2000-251868P F 20001208
 US 2000-251869P F 20001208
 US 2000-251990P F 20001208
 US 2001-764863 B1 20010117
 WO 2001-US1338 W 20010117

AB The present invention relates to novel musculoskeletal system-related polynucleotides and the polypeptides encoded by these polynucleotides herein collectively known as "musculoskeletal system antigens", and the use of such musculoskeletal system antigens for detecting disorders of the musculoskeletal system, particularly the presence of cancer and cancer metastases. More specifically, 1023 isolated musculoskeletal system-assocd. cDNA mols. are provided encoding novel musculoskeletal system-assocd. polypeptides. Novel musculoskeletal system polypeptides and antibodies that bind to these polypeptides are provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing human musculoskeletal system assocd. polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders related to the musculoskeletal system, including cancer, and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or comps. for inhibiting the prodn. and function of the polypeptides of the present invention.

IT 384873-95-4P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 [amino acid sequence; human musculoskeletal system-specific nucleic
 acids and their encoded proteins and antibodies]

L11 ANSWER 15 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:763025 HCAPLUS
 DOCUMENT NUMBER: 135:335111
 TITLE: Albumin fusion proteins with therapeutic proteins for improved shelf-life
 INVENTOR(S): Rosen, Craig A.; Haseltine, William A.
 PATENT ASSIGNER(S): Human Genome Sciences, Inc., USA
 SOURCE: PCT Int. Appl., 2001 pp.
 CODEN: PINXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001/071157	A1	20011018	WO 2001-US11988	20010412
W: AE, AG, AL, AM, AN, AO, BA, BB, BG, BR, BY, BE, CA, CH, CN, CO, CR, CY, CZ, DE, DK, DM, DO, EE, ES, FI, GB, GD, GE, GR, GM,				

HR, HU, IL, IM, IN, IO, IP, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JR, JS, JT, JU, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NO, NP, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TR, TS, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UR, US, UT, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

EP 1170786 A1 20010412 EP 2001-044114 20010412

EA: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, SK, PT, IE, SI, LT, LV, FI, PL, MM, CY, AL, TR

PRIORITY AMPL. INFO.:

US 2000-228388P F 20010412
US 2000-199384P F 20000425
US 2000-280931P F 20001221
WO 2001-78119A8 W 20010412

AB The present invention encompasses fusion proteins of albumin with various therapeutic proteins. Therapeutic proteins may be stabilized to extend the shelf-life, and/or to retain the therapeutic protein's activity for extended periods of time in soln., in vitro and/or in vivo, by partially or fully fusing or conjugating the therapeutic protein to all or a fragment or variant of albumin. The albumin fusion proteins may also reduce the need to formulate the protein solns. with large excesses of carrier proteins to prevent loss of therapeutic proteins due to factors such as binding to the container. Nucleic acid mols. encoding the albumin fusion proteins of the invention are also encompassed by the invention, as are vectors contg. these nucleic acids, host cells transformed with these nucleic acids vectors, and methods of making the albumin fusion proteins of the invention and using these nucleic acids, vectors, and/or host cells. Thus, plasmid vectors are constructed in which DNA encoding the desired therapeutic protein may be inserted for expression of the albumin fusion proteins in yeast (pPPC0005) and mammalian cells (pC4:HSA). Yeast-derived signal sequences from *Saccharomyces cerevisiae* invertase SUC2 gene, or the stannocalcin or native human serum albumin signal peptides, are used for secretion in yeast or mammalian systems, resp. Thus, the fusion product of human growth hormone with residues 1-387 of human serum albumin retains essentially intact biol. activity after 5 wk of incubation in tissue culture media at 37.degree., whereas recombinant human growth hormone used as control lost biol. activity in the first week. Although the potency of the albumin fusion proteins is slightly lower than the unused counterparts in rapid bioassays, their biol. stability results in much higher biol. activity in the longer term in vitro assay or in vivo assays. Addnl., the present invention encompasses pharmaceutical compns. comprising albumin fusion proteins and methods of treating, preventing, or ameliorating diseases, disorders or conditions using albumin fusion proteins of the invention.

IT 369644-05-3

RL: PRE (Properties)

(unclaimed protein sequence; albumin fusion proteins with therapeutic proteins for improved shelf-life)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 16 OF 26 HOAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:091023 HOAPLUS

DOCUMENT NUMBER: 138:10441

TITLE: Nucleic acids and their encoded polypeptides from human bone marrow

INVENTOR S: Ford, John E.; Boyle, Bryan L.; Tang, Y. Ten; Liu, Chengshu; Asundi, Vinod; Chen, Ping; Xue, Ailing J.; Ren, Feiyun; Demme, Edna E.

PATENT ASSIGNEE S: Hysco, Inc., USA

SOURCE: EPO Int. Appl., No. 98.000000

CLASS: H01M

DOCUMENT TYPE: Patent

LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 00
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001-34847	A1	20010205	WO 2001-34847	20010205
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BT, BU, CA, CH, CN, CR, CU, CY, CZ, DE, DK, DM, DO, EE, EG, ES, FI, GB, GR, HU, HR, IE, IL, IN, JP, KR, KS, KP, KB, KE, KG, KH, KI, KM, KN, KU, LV, LY, MA, ME, MG, MK, MN, MU, MV, MW, MY, NA, NE, NG, NI, NO, NR, NZ, OM, OS, PA, PE, PG, PH, PK, PL, PT, PY, RE, RO, RU, SD, SE, SG, SI, SK, SL, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VN, YU, ZA, ZM, ZW			
BK:	GB, HA, HE, IL, IR, IS, IT, JP, KR, KS, KP, KB, KE, KG, KH, KI, KM, KN, KU, LV, LY, MA, ME, MG, MK, MN, MU, MV, MW, MY, NA, NE, NG, NI, NO, NR, NZ, OM, OS, PA, PE, PG, PH, PK, PL, PT, PY, RE, RO, RU, SD, SE, SG, SI, SK, SL, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VN, YU, ZA, ZM, ZW			

AN 2001034447 AS 20010314
 PRIORITY APPLN. INFO.:
 US 2000-496914 A 20000203
 US 2000-598075 A 20000620
 US 2000-620325 A 20000719
 US 2000-250583P A 20001130
 WO 2001-34847 W 20010205

AB The present invention provides a collection or library of 94 nucleic acid contig sequences assembled from expressed sequence tag or cDNA libraries isolated mainly by sequencing by hybridization (SBH), std. PCR, Sanger sequencing techniques, and in some cases, sequences obtained from one or more public databases. The cDNA libraries are from human bone marrow sources and nearest neighbor sequence homologs are provided. The invention also relates to the proteins encoded by said polynucleotides, along with therapeutic, diagnostic and research applications for these polynucleotides and proteins.

IT 353568-97-5 354113-34-1

RL: ANT (Analyte); BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(amino acid sequence; nucleic acids and their encoded polypeptides from human bone marrow)

L11 ANSWER 17 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:566854 HCAPLUS
 DOCUMENT NUMBER: 135:163414
 TITLE: Human nucleic acids and their encoded proteins and antibodies
 INVENTOR(S): Rosen, Craig A.; Barash, Steven J.; Ruben, Steven M.
 PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
 SOURCE: EMT Int. Appl., 532 pp.
 ORIGIN: PINKL
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 00
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001-34847	A1	20010205	WO 2001-34847	20010205
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BT, BU, CA, CH, CN, CR, CU, CY, CZ, DE, DK, DM, DO, EE, EG, ES, FI, GB, GR, HU, HR, IE, IL, IN, JP, KR, KS, KP, KB, KE, KG, KH, KI, KM, KN, KU, LV, LY, MA, ME, MG, MK, MN, MU, MV, MW, MY, NA, NE, NG, NI, NO, NR, NZ, OM, OS, PA, PE, PG, PH, PK, PL, PT, PY, RE, RO, RU, SD, SE, SG, SI, SK, SL, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VE, VN, YU, ZA, ZM, ZW			

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R: AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP,
 AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

PERSONNEL INFO.:

US 2000-224714P P 20000814
 US 2000-224715P P 20000814
 US 2000-224716P P 20000814
 US 2000-224717P P 20000814
 US 2000-225208P P 20000814
 US 2000-225270P P 20000814
 US 2000-225757P P 20000814
 US 2000-225758P P 20000814
 US 2000-226868P P 20000822
 US 2000-226924P P 20000830
 US 2000-228287P P 20000901
 US 2000-228344P P 20000901
 US 2000-228345P P 20000901
 US 2000-228509P P 20000905
 US 2000-228513P P 20000905
 US 2000-231413P P 20000908
 US 2000-234223P P 20000911
 US 2000-234274P P 20000911
 US 2000-235834P P 20000917
 US 2000-236327P P 20000919
 US 2000-236368P P 20000919
 US 2000-236370P P 20000919
 US 2000-236802P P 20001102
 US 2000-237037P P 20001102
 US 2000-237039P P 20001102
 US 2000-237040P P 20001102
 US 2000-241735P P 20001109
 US 2000-241838P P 20001109
 US 2000-244617P P 20001111
 US 2000-249238P P 20001117
 US 2000-251866P P 20001208
 US 2000-251868P P 20001208
 US 2000-251869P P 20001208
 US 2001-264859 A2 20010117
 US 2001-264863 B1 20010117
 WO 2001-US1346 W 20010117

AB The present invention relates to novel human polynucleotides and the polypeptides encoded by these polynucleotides, and the use of such polypeptides for detecting disorders. More specifically, 79 isolated human cDNA mols. are provided encoding novel polypeptides. Antibodies that bind to these polypeptides are also provided. Also provided are vectors, host cells, and recombinant and synthetic methods for producing the novel human polynucleotides and/or polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing, treating, preventing and/or prognosing disorders and therapeutic methods for treating such disorders. The invention further relates to screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention. The present invention further relates to methods and/or compns. for inhibiting the prodn. and function of the polypeptides of the present invention.

IT 353554-69-5, Protein (human clone HFIEC13)

RL: BSU (Biological study, unclassified); PFP (Properties); BIDL
 (Biological study)

protein sequences; human nucleic acids and their encoded proteins and antibodies

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:397059 HCAPLUS

DOCUMENT NUMBER: 135:19431

TITLE: Genes of Physalis peruviana and their role in

enzymes of the synthesis of polyunsaturated fatty acids and lipids

INVENTOR S : Ierschl, Jens; Rens, Andreas; Ehrhardt, Thomas; Reindl, Andreas; Cirpus, Petra; Bischoff, Friedrich; Frank, Markus; Frenn, Anette; Duwenis, Elke; Schmidt, Ralf-Michael; Ruck, Ralf

PATENT ASSIGNER : Basf Plant Science GmbH, Germany

SOURCE: ECT Int. Appl., 113 pp.

CODEN: PINKDE

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY APP. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	FILE	DATE	APPLICATION NO.	DATE
WO 2001038841	A1	20010831	WO 1999-EP9108	19991125
W: AT, BE, CA, JP, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
WO 2001038848	A2	20010831	WO 2000-EP11615	20001122
WO 2001038849	A3	20011101		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, NE, SE, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BG, CH, CG, CI, CM, GA, GN, GW, ML, NE, NI, SN, TD, TG				
AU 2001017145	A1	20010814	AT 2001-17145	20011101
BR 2000015905	A	20020806	BR 2000-15905	20001122
EP 1282713	A2	20030212	EP 2000-979617	20001122
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, IT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:

WO 1999-EP9108 W 19991125
WO 2000-EP11615 W 20001122

AB Isolated nucleic acid mols., designated LMRP nucleic acid mols., which encode novel LMRPs from e.g. *Physcomitrella* patents are described. The invention also provides antisense nucleic acid mols., recombinant expression vectors contg. LMRP nucleic acid mols., and host cells into which the expression vectors have been introduced. The invention still further provides isolated LMRPs, mutated LMRPs, fusion proteins, antigenic peptides and methods for the improvement of the prodn. of a desired compd. from transformed cells, organisms or plants based on genetic engineering of LMRP genes in these organisms.

IT 343286-49-7

RL: BTU (Biological use, unclassified); PPP (Properties); BIL (Biological study); USES (Uses)

(amino acid sequence; genes of *Physcomitrella* patents encoding homologs of enzymes of synthesis of polyunsatd. fatty acids and lipids)

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE SE FORMAT

111 ANSWER 1 OF 20 HEADLINE: PHYSICOMITRELLA

ACCESSION NUMBER: 12414

DOCUMENT NUMBER: 12414

TITLE: Sequence-determined DNA fragments and corresponding encoded polypeptides from corn and Arabidopsis

INVENTOR(S): Alexandrov, Nikolai; Brover, Vyacheslav; Chen, Xianfeng; Subramanian, Gopalakrishnan; Troukhan, Maxim E.; Cheng, Hiansheng; Texas, J.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1168400	A2	20000906	EP 2000-301439	20000225
E: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CA 2300692	AA	20000825	CA 2000-2300692	20000225
CA 2302928	AA	20001006	CA 2000-2302928	20000406
EP 1168400	A2	20001128	EP 2000-301439	20000225
E: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1064000	A2	20001122	EP 2000-301461	20000817
E: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LT, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

THE END

[illegible]

US 1999-147148 F 19991471

AB The present invention provides DNA mols. that constitute fragments of the genome and cDNAs from Zea mays ssp. HYBRID SHEL #35A14 and Arabidopsis thaliana (ecotype Wassilewsky), and polypeptides encoded thereby. The DNA mols. are useful for specifying a gene product in cells, either as a promoter or as a protein coding sequence. In an RT-PCR assay, a termination sequence, and an additional sequence, are used to identify a gene in the cell library, in order to facilitate the expression of a gene as tools for genetic mapping, recombining or isolating identical or related DNA fragments, or identification of a particular individual organism, or for clustering of a group of organisms with a common trait. Arabidopsis DNA is used in the present expt., but the procedure is a general one. Protocols are provided for Southern hybridizations and transformation of carrot cells. [This abstr. record is one of 15 records supplemental to 302411-4112, necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

II 302411-42-3 302411-43-4

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BCU (Biological use, unclassified); FRP (Properties); BIOL (Biological study); OOST (Occurrence); USES (Uses)

amino acid sequence; sequence-deter. DNA fragments and corresponding encoded polypeptides from corn and Arabidopsis)

L11 ANSWER 21 OF 26 HCAPLUS COPYRIGHT 1999 ACS

ACCESSION NUMBER: 1 : 104 : 1041

DOCUMENT NUMBER: 134:81634

TITLE: Sequence-determined DNA fragments and corresponding encoded polypeptides from corn and Arabidopsis

INVENTOR(S): Alexandrov, Nikolai; Brover, Vyacheslav; Chen, Xianfeng; Subramanian, Gopalakrishnan; Troukhan, Maxim E.; Zheng, Liansheng; Dumas, J.

PATENT ASSIGNEE(S): Ceres Inc., USA

SOURCE: Eur. Pat. Appl., 339 pp.

CODEN: EPRXEW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1038405	A2	20000806	EP 2000-301439	20000225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, IT, LV, FI, RO				
CA 2300692	AA	20000816	CA 2000-2300692	20000225
CA 2302828	AA	20001006	CA 2000-2302828	20000406
EP 1055728	A2	20011119	EP 2001-313771	20000814
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, IT, LV, FI, RO				
EP 1054060	A2	20011119	EP 2001-314161	20000817
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, IT, LV, FI, RO				

PRIORITY AFFIN. INFO.:

US 1999-147148F	F	19990225
US 1999-145915F	F	19990727
US 1999-145951P	F	19990728
US 1999-146346F	F	19990802
US 1999-146348F	F	19990811
US 1999-146349F	F	19990812
US 1999-147038F	F	19990813
US 1999-147104F	F	19990814
US 1999-147111F	F	19990814
US 1999-147112F	F	19990815
US 1999-147117F	F	19990815

US 1999-147413F	F	19990317
US 1999-147416F	F	19990317
US 1999-147493F	F	19990317
US 1999-147938F	F	19990318
US 1999-148171F	F	19990321
US 1999-148319F	F	19990321
US 1999-148321F	F	19990321
US 1999-148707F	F	19990321
US 1999-148744F	F	19990321
US 1999-148745F	F	19990321
US 1999-148746F	F	19990321
US 1999-148788F	F	19990321
US 1999-126264F	F	19990325
US 1999-126785F	F	19990329
US 1999-127462F	F	19990401
US 1999-128234F	F	19990406
US 1999-128714F	F	19990408
US 1999-128843F	F	19990416
US 1999-130077F	F	19990419
US 1999-130449F	F	19990421
US 1999-130510F	F	19990423
US 1999-130891F	F	19990423
US 1999-131449F	F	19990428
US 1999-132048F	F	19990430
US 1999-132407F	F	19990430
US 1999-132484F	F	19990504
US 1999-132485F	F	19990504
US 1999-132486F	F	19990504
US 1999-132487F	F	19990506
US 1999-132863F	F	19990507
US 1999-134256P	P	19990511
US 1999-134218P	P	19990514
US 1999-134219P	P	19990514
US 1999-134221P	P	19990514
US 1999-134370P	P	19990514
US 1999-134768F	F	19990519
US 1999-134941P	P	19990519
US 1999-135124P	P	19990520
US 1999-135353P	P	19990521
US 1999-135629P	P	19990524
US 1999-136021P	P	19990525
US 1999-136392P	P	19990527
US 1999-136782P	P	19990528
US 1999-137222P	P	19990601
US 1999-137819F	F	19990601
US 1999-137802F	F	19990604
US 1999-137724F	F	19990607
US 1999-138194P	P	19990608

AB The present invention provides DNA mols. that constitute fragments of the genome and cDNAs from *Zea mays* (HYBRID SEED #38A18) and *Arabidopsis thaliana* (ecotype Wassilewskii), and polypeptides encoded thereby. The DNA mols. are useful for specifying a gene product in cells, either as a promoter or as a protein coding sequence, or as an ITR or as a termination sequence, and are also useful in controlling the behavior of a gene in the chromosome, in controlling the expression of a gene or as tools for genetic mapping, recognizing or isolating identical or related DNA fragments, or identification of a particular individual organism, or for clustering of a group of organisms with a common trait. *Arabidopsis* DNA is used in the present expt., but the procedure is a general one. Protocols are provided for Southern hybridizations and transformation of carrot cells. [This abstr. record is one of 18 records supplemental to CH336141, necessitated by the large no. of index entries required to fully index the document and publication system constraints.].

IT 301564-26-1 301564-27-2

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); CCB (Occurrence); USES (Uses)

(amino acid sequence; sequence-determ. DNA fragments and corresponding encoded polypeptides from corn and Arabidopsis)

L11 ANSWER 22 OF 20 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:773005 HCAPLUS

DOCUMENT NUMBER: 134:2475

TITLE: Cloning and expression of a gene encoding a putative chloroplast .omega.6 fatty acid desaturase of marine Chlamydomonas

AUTHOR(S): Miyasaka, Hitoshi; Tanaka, Satoshi; Kanakishi, Haruo

CORPORATE SOURCE: Tech. Res. Cent., The Kansai Electric Power Co., Ltd., 11-1, Nakoji 1-chome, Amagasaki, Hyogo, 651-8044, Japan

SOURCE: Plant Molecular Biology, Tokyo, 1998, 17:1, 17-21

COEN: F1B196; ISSN: 1342-4877

PUBLISHER: Japanese Society for Plant Cell and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A cDNA encoding putative chloroplast .omega.6 fatty acid desaturase was isolated from a cDNA library of marine Chlamydomonas sp. strain W-80. The mRNA level of this gene under various conditions of stress was examd. by northern blotting anal., and the transcript level was increased under a cold-stressed (4.degree.C) condition.

IT 307998-10-3

RL: PRP (Properties)

(amino acid sequence; cloning and expression of a gene encoding a putative chloroplast .omega.6 fatty acid desaturase of marine Chlamydomonas)

L11 ANSWER 23 OF 26 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:773005 HCAPLUS

DOCUMENT NUMBER: 134:127224

TITLE: Deciphering the biology of Mycobacterium tuberculosis from the complete genome sequence. [Erratum to document cited in CAl29:77224]

AUTHOR(S): Cole, S. T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S. V.; Eigimeier, K.; Gas, S.; Barry, C. E., III; Tekala, F.; Badcock, K.; Basham, D.; Brown, D.; Chillingworth, T.; Connor, R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Hornsby, T.; Jagels, K.; Krogh, A.; Molean, J.; Moule, S.; Murphy, L.; Oliver, K.; Osborne, J.; Quail, M. A.; Rajandream, M.-A.; Rogers, J.; Rutter, S.; Seeger, K.; Skelton, J.; Squares, R.; Squares, S.; Sulston, J. E.; Taylor, K.; Whitehead, S.; Barrell, B. G.

CORPORATE SOURCE: Sanger Cent., Wellcome Trust Genome Campus, Hinxton, CB10 1SA, UK

SOURCE: Nature, London, 1998, 393:6611, 1-6

COEN: NAL133; ISSN: 0028-0836

PUBLISHER: Macmillan Magazines

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Table 1 was published with some symbols missing; the correct version can be found at <http://www.sanger.ac.uk> and is given here. In Fig. 1, FliC44 was incorrectly labeled as FliC37 instead of FliC44. Two of the genes for mycolyl transferases were inverted: FliC44 and FliC45 and not FliC45 and FliC44, whereas FliC46 and FliC47 were in the correct pattern. FliC44 and not FliC45 is the major antigen. Immun. 12, 11-13; 1991; FliC45 is now designated FliC44. The sequence of FliC44 from M. Evans BCG-Fastflow

presented in Fig. 9. It was incorrect and should have been a 10-mer
 deletion instead of 11-mer.

IT 208786-02-1

EL: PEP Properties

Deciphering the Biol. of Mycobacterium tuberculosis from the complete
 genome sequence [Hamlin,]

L11 ANSWER 24 OF 26 HCAPLUS COPYRIGHT 2016 ACS

ACCESSION NUMBER: 1998:61353 HCAPLUS

DOCUMENT NUMBER: 127:114437

TITLE: Deciphering the Biology of Mycobacterium tuberculosis
 from the complete genome sequence

AUTHOR(S): Cole, S. T.; Brosch, R.; Parkhill, J.; Garnier, T.;
 Churcher, C.; Harris, D.; Gordon, S. V.; Eiglmeier,
 K.; Gas, S.; Barry, C. E., III.; Tekala, F.; Badcock,
 K.; Basham, D.; Brown, D.; Chillingworth, T.; Connor,
 R.; Davies, R.; Devlin, K.; Feltwell, T.; Gentles, S.;
 Hamlin, N.; Holroyd, S.; Hornsby, T.; Jagels, K.;
 Krogh, A.; McLean, L.; Mole, S.; Murphy, L.; Oliver,
 K.; Osborne, J.; Quail, M. A.; Rabinovitch, M.-A.;
 Rogers, J.; Rutter, S.; Seeger, K.; Skellern, J.;
 Squares, R.; Squares, S.; Solsten, J. E.; Taylor, K.;
 Whitehead, S.; Barrell, B. G.

CORPORATE SOURCE: Sanger Cent., Wellcome Trust Genome Campus, Hinxton,
 CB10 1SA, UK

SOURCE: Nature (London) 1998, 393 6633, 537-544

CODEN: NATURE; ISSN: 1362-4466

PUBLISHER: Macmillan Magazines

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Countless millions of people have died from tuberculosis, a chronic
 infectious disease caused by the tubercle bacillus. The complete genome
 sequence of the best-characterized strain of Mycobacterium tuberculosis,
 H37Kv, was detd. and analyzed in order to improve our understanding of the
 biol. of this slow-growing pathogen and to help the conception of new
 prophylactic and therapeutic interventions. The genome comprises
 4,411,529 base pairs, contains around 4000 genes, and has a very high G+C
 content that is reflected in the biased amino acid content of the
 proteins. M. tuberculosis differs radically from other bacteria in that a
 very large portion of its coding capacity is devoted to the prodn. of
 enzymes involved in lipogenesis and lipolysis, and to 2 new families of
 glycine-rich proteins with a repetitive structure that may represent a
 source of antigenic variation.

IT 208786-02-1

EL: PEP Properties

amino acid sequence; deciphering the biology of Mycobacterium
 tuberculosis from the complete genome sequence

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 26 HCAPLUS COPYRIGHT 2016 ACS

ACCESSION NUMBER: 1998:61353 HCAPLUS

DOCUMENT NUMBER: 127:114437

TITLE: Cloning of a gene for chloroplast (omega)-desaturase
 of a green alga, Chlamydomonas reinhardtii

AUTHOR(S): Sato, Norihiro; Fujiwara, Shoko; Kawaguchi, Akihiko;
 Tezuka, Mikio

CORPORATE SOURCE: School of Life Science, Tokyo University of Pharmacy
 and Life Science, Tokyo, 132-85, Japan

SOURCE: Journal of Biochemistry Tokyo 1997, 120 6,
 1224-1232

CODEN: JBIAB; ISSN: 0021-964X

PUBLISHER: Igakasei Biochemical Society

[illegible]

24 A gene for chloroplast .omega.6 desaturase, which catalyzes the desatn. of monoenols to dienoic acids in chloroplasts, was isolated from *Chlamydomonas reinhardtii*. Reverse transcription-polymerase chain reaction was first performed with total RNA from the mutant, hf-9, and the cDNA was amplified by PCR with primers designed from the cDNA of *Chlamydomonas reinhardtii*. An amplified cDNA fragment of 1.1 kb, coding a frame for a protein homologous to these desaturases, was used as a probe for screening cDNA and genomic DNA libraries of *C. reinhardtii*. The cDNA clone of 2.2 kb obtained contained an open reading frame encoding a protein of 424 amino acids with a putative mol. mass of 48.4 kDa, the amino acid sequence of which showed 40-51% homol. to those of higher plant plastid .omega.6 and bacterial .omega.6 desaturases. Introduction of the cloned genomic counterpart of this cDNA, designated as *des6*, into a *Chlamydomonas* mutant with defects in chloroplast .omega.6 desatn. and in the activities of photosystems I and II (PSI and PSII) complemented the desatn. mutation, indicating that the *des6* gene codes for chloroplast .omega.6 desaturase. The complemented strains did not recover from the photosynthetic lesions, but showed lower PSII activity at 45.degree. than the desatn. mutant, proving that the photosynthetic lesions in hf-9 are not caused by the desatn. mutation, and that the lowered unsatn. level of chloroplast lipids in the mutant is responsible for the expression of this high temp. of PSII activity, one of the thylakoid membrane functions.

IT 204279-00-5

RI: BSU (Biological study, unclassified) ; RRP (Properties) ; BIO1 (Biological study)

(amino acid sequence; cloning and sequence of gene desd for chloroplast .omega.6 desaturase of a green alga, *Chlamydomonas reinhardtii*)

111 ANSWER 26 OF 26 HOLYROS COPYRIGHT 2013 LLC

ACCESSION NUMBER: 1998:980041 HOLDINGS

DOCUMENT NUMBER: 124:47157

TITLE: Identification and functional analysis of the transfer region of plasmid pMEA300 of the methylotrophic actinomycete *Amicorolatus methanolicus*

AUTHOR(S): Vrijbloed, J. W.; van der Put, N. M. J.; Dijkhuizen, L.

CORPORATE SOURCE: Dep. Microbiology, Univ. Groningen, Haren, 9751, Neth.

SOURCE: *Journal of Interpersonal Violence*, (1995), 177 (22), 6499-505

CODEN: JOBRAY; ISSN: 0021-9193

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Anycolatoris moribundica contains a 13.3-Kb plasmid (pMHA300) that is present either as an integrated element or as an autonomously replicating plasmid. Conjugational transfer of pMHA300 results in growth stimulation, rates of growth inhibition that require apparent donor plasmid copy number cells equal to a cell-to-cell ratio of approximately 100:1 donor cells. A 6.1-Kb pMHA300 DNA region specifying the functions of conjugation and peck formation was sequenced, revealing 18 open reading frames. This is the first sequence of the transfer region of a plasmid from a nonstreptomyces actinomycete. No clear similarities were found between the deduced sequences of the 12 putative Tra proteins of pMHA300 and those of Streptomyces plasmids. All Tra proteins of pMHA300 thus may represent unfamiliar types. A detailed mutational anal. showed that at least 12 individual proteins, TraA, TraB, TraC, TraD, TraE, TraF, TraG, TraH, TraI, TraJ, TraK, and TraL, are required for efficient transfer of pMHA300. Their disruption resulted in a clear rank in the conjugational transfer frequency, ranging from 10² times (10²-fold TraD to 10³ times 10³-fold TraC, and in reduced peck sizes. At least two proteins, TraI and TraJ, and TraB (signal car), were shown to be

responsible for the intracellular localization of the
pMEA311-encoded NtrA protein. The trxA-21A intracellular region was shown.

171885-85-1

EL: PROPERTIES

amino acid sequence; identification and functional anal. of transfer
region of plasmid pMEA311 in methylotrophic actin mycelium Amycolatopsis
methan. 112a.

=> til reg

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DICTIONARY FILE UPDATES: 13 FEB 03 - HIGHEST PN 449041-1-1

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Please note that search-term pricing does apply when
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PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>

=>

=>

=> d .seq 13 1-38

13 ANSWER 1 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 487379-77-1 REGISTRY

CN GenBank BAA83822 (901) (CA INDEX NAME)

OTHER NAMES:

CN GenBank BAA83822 (Translated from: GenBank AB131546)

SQL 401

SEQ 201 QERKMDWNGV TSALFKFFLG TPLKLEASNG HWAINHFDLN KYTEKQRPVV

=====

HITS AT: 232-237

RELATED SEQUENCES AVAILABLE WITH SEQLINK

13 ANSWER 2 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 487323-40-1 REGISTRY

CN GenBank BAB11133 (901) (CA INDEX NAME)

OTHER NAMES:

CN GenBank BAB11133 (Translated from: GenBank AB16884)

SQL 216

SEQ 51 GVVVKKRFRK IYFVYVVAI TWAPWHFFVYV IYFVYVVAI IYFVYVVAI

HITS AT: 71-

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L3 ANSWER 3 OF 37 REGISTRY COPYRIGHT 2003 ACS
 RN 480304-41-8 REGISTRY
 CN GenBank AAM63366 (901) (CA INDEX NAME)
 OTHER NAMES:
 CN GenBank AAM63366 (Translated from: GenBank AY114663)
 SQL 311

SEQ 1 MWRRAAVGVW AMWHEANLW ALFSAFYIS RIVLAPPINI IMFIFWAPP
 = =====
 HITS AT: 11-15

L3 ANSWER 4 OF 37 REGISTRY COPYRIGHT 2003 ACS
 RN 480179-41-8 REGISTRY
 CN GenBank AAM63366 (901) (CA INDEX NAME)
 OTHER NAMES:
 CN GenBank AAM63366 (Translated from: GenBank AY056161)
 SQL 320

SEQ 141 ALLSDAKFCKE EGAPFIVVSS RSLIKSLAKL NESPYWDSID WAKWHFFWWD
 =====
 HITS AT: 141-146

RELATED SEQUENCES AVAILABLE WITH SEQLINK

L3 ANSWER 5 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 481335-47-1 REGISTRY
 CN GenBank CAC42693 (901) (CA INDEX NAME)
 OTHER NAMES:
 CN GenBank CAC42693 (Translated from: GenBank AX114921)
 SQL 170

SEQ 51 KTLMEIGMGP LRPWASIGHW LLWHFDLSKY RESEKPRVKI SLAAVFAFMA
 = =====
 HITS AT: 70-75

L3 ANSWER 6 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 480183-47-8 REGISTRY
 CN Protein: (human clone HF1ED18) (901) (CA INDEX NAME)
 OTHER NAMES:
 CN 104: PN: US20020165137 SEQID: 104 claimed protein
 NTE

type	location	description
uncommon	Aaa-86	-
uncommon	Aaa-87	-
uncommon	Aaa-114	-
uncommon	Aaa-141	-
uncommon	Aaa-145	-

SQL 175

SEQ 51 APRIRAGHRA RRTGCVRAWH FQSKKASIA SUREPHEWIS USPEFNHISA
 = =====
 HITS AT: 60-71

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 187134700

L3 ANSWER 7 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 487694-48-9 REGISTRY
CN Protein (Mycobacterium tuberculosis strain H37R61 gene MT0166) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AE010414-derived protein GI 13479114
SQL 277

SEQ 1 NITHYFPEFQ FVAFEDHIA KAPHWVWVH FTHALNLIQL ITAGRLAGE
=====

HITS AT: 26-31

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:217411

L3 ANSWER 8 OF 34 REGISTRY COPYRIGHT 2003 ACS

RN 440301-94-8 REGISTRY

CN Protein (Methanococcus marisnigri strain Jc01 gene MM0191) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AE013454-derived protein GI 13916703
SQL 276

SEQ 151 LQSRYTEFMA SLIFGILWQL WHEPLIFKQD MYQYEIFHEN IYHAYNEFVG
=====

HITS AT: 168-173

REFERENCE 1: 137:74267

L3 ANSWER 9 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 437141-30-5 REGISTRY

CN 6-Phosphogluconolactonase (Arabidopsis thaliana clone RAFL05-08-012 (RC9888) gene At5g24400) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AF370305-derived protein GI 13878085
SQL 219

SEQ 51 GGSLIKSLRK LVESFYVDSI DWARKHFFWY DERWTFKNEH DSNYKLAYDS
=====

HITS AT: 72-77

REFERENCE 1: 137:29549

L3 ANSWER 10 OF 39 REGISTRY COPYRIGHT 2003 ACS

RN 437115-91-8 REGISTRY

CN Protein (human clone US20020048763-SEQID-44744 exon-encoded fragment) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 4708: FN: US20020048763 SEQID: 44744 claimed protein
SQL 36

SEQ 1 NIIQLLEGFI HNGAWQMAWR AWHFKFILME SIEGLR
== =====

HITS AT: 19-24

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:24745

L3 ANSWER 11 OF 34 REGISTRY COPYRIGHT 2003 ACS

RN 417404-00-0 REGISTRY

CN L-Arginine, 1-(2-argininyl-L-isoleucinyl-L-isoleucinyl-L-alanyl-L-arginyl-L-tyrosyl-L-leucyl-L-alpha-glutamyl-L-tyrosyl-L-phenylalanyl-L-isoleucinyl-L-histidyl-L-

histidylglycyl-L-alanyl-L-tryptophyl-L-glutaminyl-L-methionyl-L-alanyl-L-tryptophyl-L-arginyl-L-alanyl-L-tryptophyl-L-histidyl-L-phenylalanyl-L-lysyl-L-phenylalanyl-L-isoleucyl-L-leucyl-L-methionyl-L-.alpha.-glutamyl-L-seryl-L-isoleucyl-L-.alpha.-glutamylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 981: PN: W00157273 SEQID: 34965 claimed protein

CN Protein (human clone W00157273-SEQID-34965 exon-encoded fragment)

SQL 36

SEQ 1 NITPLLEPFI HHGAVQMAWR AWHEFFILME SIFULR

== ==

HITS AT: 19-24

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:351357

13 ANSWER 12 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 411969-90-5 REGISTRY

CN L-Arginine, L-asparaginyl-L-isoleucyl-L-isoleucyl-L-glutaminyl-L-leucyl-L-leucyl-L-.alpha.-glutamylglycyl-L-phenylalanyl-L-isoleucyl-L-histidyl-L-histidylglycyl-L-alanyl-L-tryptophyl-L-glutaminyl-L-methionyl-L-alanyl-L-tryptophyl-L-arginyl-L-alanyl-L-tryptophyl-L-histidyl-L-phenylalanyl-L-lysyl-L-phenylalanyl-L-isoleucyl-L-leucyl-L-methionyl-L-.alpha.-glutamyl-L-seryl-L-isoleucyl-L-.alpha.-glutamylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 351: PN: W00157275 SEQID: 33853 claimed protein

CN Protein (human brain clone W00157275-SEQID-33853 exon-encoded fragment)

SQL 36

SEQ 1 NITQLLEGFI HHGAWQMAWR AWHEKFILME SIEGLE

== ==

HITS AT: 19-24

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:320295

13 ANSWER 13 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 401874-66-6 REGISTRY

CN Protein (Methanosarcina acetivorans strain C2A gene MA1162) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN GerBank A0010783-derived protein GI 19914997

SQL 289

SEQ 151 LQSRHTFFTA SIFFSILNSL WHFPLIEVNN MYQVEIFHEN VVYAVNFEVS

=== ===

HITS AT: 168-173

REFERENCE 1: 136:111114

13 ANSWER 14 OF 38 REGISTRY COPYRIGHT 2003 ACS

RN 401671-83-4 REGISTRY

CN L-Arginine, L-asparaginyl-L-isoleucyl-L-isoleucyl-L-glutaminyl-L-leucyl-L-leucyl-L-.alpha.-glutamylglycyl-L-phenylalanyl-L-isoleucyl-L-histidyl-L-histidylglycyl-L-alanyl-L-tryptophyl-L-glutaminyl-L-methionyl-L-alanyl-L-tryptophyl-L-arginyl-L-alanyl-L-tryptophyl-L-histidyl-L-phenylalanyl-L-lysyl-L-phenylalanyl-L-isoleucyl-L-leucyl-L-methionyl-L-.alpha.-glutamyl-L-seryl-L-isoleucyl-L-.alpha.-glutamylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 855: PN: W01157270 SEQID: 3481 claimed protein
 CN Protein (human bone marrow clone W01157270-SP, ID-1) exon-extended
 fragment (9CI) (CA INDEX NAME)
 SQL 36

SEQ 1 NIIQLLEGFI HHGAWMAWR ANHNPFIEME SIESLR
 == ==

HITS AT: 17-24

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 156:127-12

L3 ANSWER 16 OF 36 REGISTRY COPYRIGHT 2003 ACS
 RN 400957-73-5 REGISTRY
 CN Protein (human fetal liver clone W01157277-SEQID-33514 exon-extended
 fragment) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 528: PN: W00157277 SEQID: 33514 claimed protein
 SQL 37

SEQ 1 NIIQLLEGFI HHGAWMAWR ANHNPFIEME SIESLR
 == ==

HITS AT: 19-24

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 156:195262

L3 ANSWER 16 OF 36 REGISTRY COPYRIGHT 2003 ACS
 RN 400696-91-5 REGISTRY
 CN Secretory protein (human clone HNNBM45 53-amino acid precursor) (9CI) (CA
 INDEX NAME)

OTHER NAMES:

CN 96: PN: W00216390 SEQID: 98 claimed protein
 NTE

type	location	sequence
uncommon	Aaa-50	-

SQL 53

SEQ 1 MVFLSHLPCT KRLFLALLAL WAWHPSYMF ADPWDFGIP DYLQATLSI
 == ==

HITS AT: 21-26

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 156:195341

L3 ANSWER 17 OF 36 REGISTRY COPYRIGHT 2003 ACS
 RN 400664-76-7 REGISTRY
 CN L-Arginine, L-asparaginyl-L-isoleucyl-L-isoleucyl-L-glutaminyl-L-leucyl-L-
 leucyl-L-.alpha.-glutamylglycyl-L-phenylalanyl-L-isoleucyl-L-histidyl-L-
 histidylglycyl-L-alanyl-L-tryptophyl-L-glutaminyl-L-methionyl-L-alanyl-L-
 tryptophyl-L-arginyl-L-alanyl-L-tryptophyl-L-histidyl-L-phenylalanyl-L-
 lysyl-L-phenylalanyl-L-isoleucyl-L-leucyl-L-methionyl-L-.alpha.-glutamyl-L-
 seryl-L-isoleucyl-L-.alpha.-glutamylglycyl-L-leucyl-L- (CA INDEX
 NAME)

OTHER NAMES:

CN 665: PN: W01157270 SEQID: 3481 claimed protein

SQL 36

Figure 1: Schematic representation of the experimental design. The figure is divided into two main sections: 'Pre-treatment' and 'Treatment'. The 'Pre-treatment' section shows a timeline from 'Baseline' to 'Pre-treatment' with a 'Baseline' measurement and a 'Pre-treatment' measurement. The 'Treatment' section shows a timeline from 'Pre-treatment' to 'Post-treatment' with a 'Pre-treatment' measurement, a 'Post-treatment' measurement, and a 'Post-treatment' measurement. The 'Pre-treatment' section also includes a 'Pre-treatment' measurement and a 'Pre-treatment' measurement. The 'Treatment' section includes a 'Pre-treatment' measurement, a 'Post-treatment' measurement, and a 'Post-treatment' measurement.

[illegible]

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$$N(\lambda) = \frac{1}{2}(\lambda + \sqrt{\lambda^2 - 4}) - \frac{1}{2}(\lambda - \sqrt{\lambda^2 - 4}) = \sqrt{\lambda^2 - 4}$$
[illegible]

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2017-2018 **GERMAN-AMERICAN-ORIENTED** **RESEARCH** **IN** **THE** **U.S.**

$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$

[illegible]

1111-1112. 1920-1921

REFERENCE: 1. 196:145954

MASTER 18 OF 83 REPRODUCTION COPYRIGHT 2003

RN 394342-70-2 REGISTRY

CN SPERMIDINE SYNTHASE PROTEIN (*Ralstonia solanacearum* strain GMI1000 gene speE2) (SCF) (CA INDEX NAME)

OTHER NAMES:

CN GenBank AL646084-derived protein GI 17431779

501 525

Model	Model	Model	Model
1	2	3	4

— 222 —

HITS AT: 197-200

REFERENCE : 1. 1961. 147-90.

13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 8

RM 33-873-93-4 REGISTRY

CN Musculoskeletal-associated antigen (human clone HFIEC13-883185 fragment)
 (9CI) (CA INDEX NAME)

OTHER NAMES:

ON THE CONSTRUCTION OF THE

NEL

— — — — —

uncommon. $\text{H}_2\text{O} = 90$ - -

Figure 1

uncommon. A4-124 - -

| | | | |
|----------|---------|---|---|
| uncommon | Agg-141 | - | - |
|----------|---------|---|---|

CONCLUSION **Acknowledgments**

1. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971) using a Shimadzu 1601 UV-Visible Spectrophotometer. The concentration of chlorophyll was expressed in mg/L.

| Variable | Mean | SD | Min | Max |
|----------------------|------|------|------|------|
| Age | 38.5 | 12.5 | 25 | 65 |
| Gender | 0.5 | 0.5 | 0 | 1 |
| Marital status | 0.5 | 0.5 | 0 | 1 |
| Education | 12.5 | 2.5 | 9 | 16 |
| Income | 1500 | 500 | 1000 | 2500 |
| Health status | 0.5 | 0.5 | 0 | 1 |
| Smoking status | 0.5 | 0.5 | 0 | 1 |
| Alcohol consumption | 0.5 | 0.5 | 0 | 1 |
| Exercise frequency | 0.5 | 0.5 | 0 | 1 |
| Stress level | 0.5 | 0.5 | 0 | 1 |
| Depression score | 0.5 | 0.5 | 0 | 1 |
| Life satisfaction | 0.5 | 0.5 | 0 | 1 |
| Quality of life | 0.5 | 0.5 | 0 | 1 |
| Overall health | 0.5 | 0.5 | 0 | 1 |
| Physical health | 0.5 | 0.5 | 0 | 1 |
| Mental health | 0.5 | 0.5 | 0 | 1 |
| Social health | 0.5 | 0.5 | 0 | 1 |
| Emotional health | 0.5 | 0.5 | 0 | 1 |
| Behavioral health | 0.5 | 0.5 | 0 | 1 |
| Environmental health | 0.5 | 0.5 | 0 | 1 |
| Occupational health | 0.5 | 0.5 | 0 | 1 |
| Financial health | 0.5 | 0.5 | 0 | 1 |
| Family health | 0.5 | 0.5 | 0 | 1 |
| Community health | 0.5 | 0.5 | 0 | 1 |
| National health | 0.5 | 0.5 | 0 | 1 |
| Global health | 0.5 | 0.5 | 0 | 1 |
| World health | 0.5 | 0.5 | 0 | 1 |
| Universal health | 0.5 | 0.5 | 0 | 1 |
| Human health | 0.5 | 0.5 | 0 | 1 |
| Planetary health | 0.5 | 0.5 | 0 | 1 |
| Ecosystem health | 0.5 | 0.5 | 0 | 1 |
| Biodiversity health | 0.5 | 0.5 | 0 | 1 |
| Climate health | 0.5 | 0.5 | 0 | 1 |
| Environmental health | 0.5 | 0.5 | 0 | 1 |
| Natural health | 0.5 | 0.5 | 0 | 1 |
| Wildlife health | 0.5 | 0.5 | 0 | 1 |
| Marine health | 0.5 | 0.5 | 0 | 1 |
| Terrestrial health | 0.5 | 0.5 | 0 | 1 |
| Aquatic health | 0.5 | 0.5 | 0 | 1 |
| Forest health | 0.5 | 0.5 | 0 | 1 |
| Mountain health | 0.5 | 0.5 | 0 | 1 |
| Coastal health | 0.5 | 0.5 | 0 | 1 |
| Urban health | 0.5 | 0.5 | 0 | 1 |
| Rural health | 0.5 | 0.5 | 0 | 1 |
| Suburban health | 0.5 | 0.5 | 0 | 1 |
| Metropolitan health | 0.5 | 0.5 | 0 | 1 |
| Global health | 0.5 | 0.5 | 0 | 1 |
| World health | 0.5 | 0.5 | 0 | 1 |
| Human health | 0.5 | 0.5 | 0 | 1 |
| Planetary health | 0.5 | 0.5 | 0 | 1 |
| Ecosystem health | 0.5 | 0.5 | 0 | 1 |
| Biodiversity health | 0.5 | 0.5 | 0 | 1 |
| Climate health | 0.5 | 0.5 | 0 | 1 |
| Environmental health | 0.5 | 0.5 | 0 | 1 |
| Natural health | 0.5 | 0.5 | 0 | 1 |
| Wildlife health | 0.5 | 0.5 | 0 | 1 |
| Marine health | 0.5 | 0.5 | 0 | 1 |
| Terrestrial health | 0.5 | 0.5 | 0 | 1 |
| Aquatic health | 0.5 | 0.5 | 0 | 1 |
| Forest health | 0.5 | 0.5 | 0 | 1 |
| Mountain health | 0.5 | 0.5 | 0 | 1 |
| Coastal health | 0.5 | 0.5 | 0 | 1 |
| Urban health | 0.5 | 0.5 | 0 | 1 |
| Rural health | 0.5 | 0.5 | 0 | 1 |
| Suburban health | 0.5 | 0.5 | 0 | 1 |
| Metropolitan health | 0.5 | 0.5 | 0 | 1 |
| Global health | 0.5 | 0.5 | 0 | 1 |
| World health | 0.5 | 0.5 | 0 | 1 |
| Human health | 0.5 | 0.5 | 0 | 1 |
| Planetary health | 0.5 | 0.5 | 0 | 1 |
| Ecosystem health | 0.5 | 0.5 | 0 | 1 |
| Biodiversity health | 0.5 | 0.5 | 0 | 1 |
| Climate health | 0.5 | 0.5 | 0 | 1 |
| Environmental health | 0.5 | 0.5 | 0 | 1 |
| Natural health | 0.5 | 0.5 | 0 | 1 |
| Wildlife health | 0.5 | 0.5 | 0 | 1 |
| Marine health | 0.5 | 0.5 | 0 | 1 |
| Terrestrial health | 0.5 | 0.5 | 0 | 1 |
| Aquatic health | 0.5 | 0.5 | 0 | 1 |
| Forest health | 0.5 | 0.5 | 0 | 1 |
| Mountain health | 0.5 | 0.5 | 0 | 1 |
| Coastal health | 0.5 | 0.5 | 0 | 1 |
| Urban health | 0.5 | 0.5 | 0 | 1 |
| Rural health | 0.5 | 0.5 | 0 | 1 |
| Suburban health | 0.5 | 0.5 | 0 | 1 |

[illegible]

RELATED SEQUENCES AVAILABLE WITH JK LINK

REFERENCE 1: 135:68144

L3 ANSWER 21 OF 34 REGISTRY COPYRIGHT 2013 ACS
 RN 369644-15-3 REGISTRY
 CN 376: FN: W00157187 SEQID: 176 claimed protein (9CI) (CA INDEX NAME)
 NTE

| type | location | description |
|---------|----------|-------------|
| unknown | Asn-82 | - |

SQL 53

SEQ 1 MVFLSHLFST NRLFILLALI NASWHFSYMF ADRAWDFGIP DRYLQAYLSI

HITS AT: 21-26

RELATED SEQUENCES AVAILABLE WITH JK LINK

REFERENCE 1: 135:335111

L3 ANSWER 22 OF 38 REGISTRY COPYRIGHT 2013 ACS
 RN 354113-34-1 REGISTRY
 CN L-Phenylalanine, L-methionyl-L-glutaminyl-L-leucyl-L-prolyl-L-isoleucyl-L-tryptophyl-L-leucyl-L-histidyl-L-leucyl-L-seryl-L-seryl-L-tyrosyl-L-isoleucyl-L-tryptophyl-L-leucyl-L-isoleucyl-L-tryptophyl-L-histidyl-L-phenylalanyl-L-arginyl-L-threonyl-L-methionyl-L-.alpha.-glutamyl-L-leucyl-L-isoleucyl-L-seryl-L-alanyl-L-seryl-L-valyl-L-leucyl-L-seryl-L-valyl-L-.alpha.-aspartyl-L-leucyl-L-leucyl-L-isoleucyl-L-leucylglycyl-L-leucyl-L-leucyl-L-tyrosyl-L-lysyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 176: FN: W00157187 SEQID: 176 claimed protein
 CN Bone marrow-specific protein (human clone W00157187-SEQID-176 precursor)
 SQL 43

SEQ 1 NQLFVNLHLS SYVNLINHR TMELISASVL SVDLLILGLL YKF

HITS AT: 14-19

REFERENCE 1: 135:163431

L3 ANSWER 13 OF 34 REGISTRY COPYRIGHT 2013 ACS
 RN 353369-07-3 REGISTRY
 CN Bone marrow-specific protein (human clone W00157187-SEQID-364 contig-encoded precursor) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 361: FN: W00157187 SEQID: 364 claimed protein
 NTE

| type | location | description |
|---------|----------|-------------|
| unknown | Asn-82 | - |

SQL 96

SEQ 51 EWHMQLFTWL HISSYINLW HFTMELISA CVLSVLLIL GLLYKF

HITS AT: 60-72

REFERENCE 1: 135:163431

L3 ANSWER 14 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 31214-01-8 REGISTRY
 CN Protein human clone HF1E018 (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 94: RN: W0110444 SEQID: 114 claimed protein.
 NTE

| type | location | description |
|----------|----------|-------------|
| uncommon | AAA-46 | - |
| uncommon | AAA-48 | - |
| uncommon | AAA-114 | - |
| uncommon | AAA-141 | - |
| uncommon | AAA-141 | - |

SQL 178

SEQ 51 AQRLRAGHRA GGTGCWGAWH FSGSWRGSLA SVGPVPPNVS VSQPFXXFXSA

HITS AT: 66-71

***RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE 1: 135:163414

L3 ANSWER 25 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 343286-49-7 REGISTRY
 CN Protein LMRP (Physcomitrella patens clone 55_pk5_b04fwd lipid metabolism-related) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 241: RN: W0012941 SEQID: 141 claimed protein.
 SQL 173

SEQ 51 PATKTLMEIG MGPLRPWASI GHNLWHFDL SKYRESEKPR VKISLAAVEA

HITS AT: 73-78

REFERENCE 1: 135:19831

L3 ANSWER 26 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 307998-10-3 REGISTRY
 CN Desaturase, fatty acid .omega.6- (Chlamydomonas strain W-80) (9CI) (CA INDEX NAME)
 SQL 421

SEQ 201 QEKMKDWNGV TSALFKFFLG TELKLWASVG HWAINHFDLN KYTEKQRPRV

HITS AT: 131-137

***RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE 1: 134:2473

L3 ANSWER 27 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 302648-00-5 REGISTRY
 CN Protein Arabidopsis thaliana clone W00411111 (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 969: RN: EF100412 SEQID: 606 claimed protein.
 SQL 286

SEQ 51 GADLIKGLAK LNESFYVIAI LWARWHFFWY LERWVKNHD LSNYKLATYS

HITS AT: 12-17

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 133:318297

L3 ANSWER 28 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 302645-68-4 REGISTRY
 CN Protein (Arabidopsis thaliana clone Ceres_214214) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 968: PN: EP1033408 SEQID: 60968 claimed protein
 SQL 325

SEQ 101 ADLSEKFCKE RGAFTVVVSG GSLIKSLRKL VESPYVDSID WARWHFFWVD
 =====

HITS AT: 141-146

REFERENCE 1: 133:318297

L3 ANSWER 29 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 302411-43-4 REGISTRY
 CN Protein (Arabidopsis thaliana clone Ceres_2113368) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 163: PN: EP1033405 SEQID: 55163 claimed protein
 SQL 256

SEQ 51 GGSLLIKSLRK LVESPYVDSI DWARWHFFWV DERVVPKNHD DSNYKLAYDS
 =====

HITS AT: 72-77

REFERENCE 1: 133:318296

L3 ANSWER 30 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 302411-42-3 REGISTRY
 CN Protein (Arabidopsis thaliana clone Ceres_2113367) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 162: PN: EP1033405 SEQID: 55162 claimed protein
 SQL 325

SEQ 101 ADLSEKFCKE RGAFTVVVSG GSLIKSLRKL VESPYVDSID WARWHFFWVD
 =====

HITS AT: 141-146

REFERENCE 1: 133:318296

L3 ANSWER 31 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 301564-27-2 REGISTRY
 CN Protein (Arabidopsis thaliana clone Ceres_1025180) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 1596: PN: EP1033405 SEQID: 7409 claimed protein
 SQL 256

SEQ 51 GGSLLIKSLRK LVESPYVDSI DWARWHFFWV DERVVPKNHD DSNYKLAYDS
 =====

HITS AT: 72-77

REFERENCE 1: 133:306360

L3 ANSWER 32 OF 38 REGISTRY COPYRIGHT 2003 ACS
 RN 301564-26-1 REGISTRY
 CN Protein (Arabidopsis thaliana clone Ceres_1025179) (9CI) (CA INDEX NAME)
 OTHER NAMES:
 CN 1595: PN: EP1033405 SEQID: 7408 claimed protein
 SQL 325

[illegible]

* * * * *

SQL 6

| CONCENTRATION | CONCENTRATION | IN CONCENTRATION | CONCENTRATION | CONCENTRATION | CONCENTRATION |
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| CONCENTRATION | CONCENTRATION | CONCENTRATION | CONCENTRATION | CONCENTRATION | CONCENTRATION |

REFERENCE 1: 133:145916

SQL 6

REFERENCE

SQL 6

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 99. $\frac{1}{2} \log 2$
 100. $\frac{1}{2} \log 2$

501 130

[illegible]

RELATED SEQUENCES AVAILABLE WITH SE_LINK

REFERENCE 1: 130:120307

REFERENCE 2: 130:120307

L3 ANSWER 37 OF 38 REGISTRY COPYRIGHT 2013: AIN
 RN 204279-10-1 REGISTRY
 CN Desaturase, fatty acid .omega.6- (Chlamydomonas reinhardtii clone pCD1 gene des6 reduced) (PDI) (CA INDEX NAME)
 OTHER NAMES:
 CN .omega.6 Desaturase Chlamydomonas reinhardtii clone pCD1 gene des6 reduced
 CN GenBank Ab. 764 -desaturase protein M. 10.2011
 SQL 424

SEQ 201 VTEADMAKWD STSAMLYKVF LGTPLKLWAS VGHWLVWHFD LNKYTPKQRT
 =====

HITS AT: 234-239

REFERENCE 1: 124:214937

L3 ANSWER 38 OF 38 REGISTRY COPYRIGHT 2013: AIN
 RN 171885-85-1 REGISTRY
 CN Protein TraH (plasmid pMEA300) (PDI) (CA INDEX NAME)
 OTHER NAMES:
 CN Protein TraH (Amycolatopsis methanolica plasmid pMEA300)
 SQL 115

SEQ 1 MFTPEPKPTT DHTGQSTTEA VEARRAACLA IYTNAKYPTR TTQTVSWIGW
 51 HFGELSGVVV PLGLGAAVWD GFYALSLLTA LGWAANELRL RRQQRAVRTR
 ==

HITS AT: 47-52

REFERENCE 1: 124:47157

1. *Prunella vulgaris* L.
 2. *Prunella vulgaris* L.
 3. *Prunella vulgaris* L.
 4. *Prunella vulgaris* L.
 5. *Prunella vulgaris* L.
 6. *Prunella vulgaris* L.
 7. *Prunella vulgaris* L.
 8. *Prunella vulgaris* L.
 9. *Prunella vulgaris* L.
 10. *Prunella vulgaris* L.

ccurate

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F/SQSP
LVSTKRHF] [C
LVPTP] [GAI
16
C $XL=<50
F (2003 OR
F (L6 OR L7

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James Thompson, *Director*

1. The first step is to identify the key components of the system. This includes understanding the hardware, software, and data involved.

DA, DB, DS, DI, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

PRIORITY APPLN. INFO.:

US 2000-006132P P 20000531
 US 2000-006132P P 20000531
 US 2000-006132P P 20000531
 US 2000-006132P P 20000531
 US 2000-006132P P 20000531

AB The present invention provides 11,491 ORFX, novel human polypeptide fragments, as well as the 11,491 cDNA fragments encoding ORFX and antibodies that immunospecifically bind to ORFX or any derivs., variants, mutants, or fragments of the ORFX polypeptides, polynucleotides, or antibodies. The invention addnl. provides methods in which the ORFX polypeptides, polynucleotides, and antibodies are used in detection and treatment of a broad range of pathol. states, as well as in other uses. [This abstr. record is one of the records in a data base created by the large no. of index entries required to fully index the document and publication system constraints.].

IT 434378-63-9P

RL: ANT (Analyte); BPN (Biosynthetic preparation); BST (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USMS (Uses)
 (amino acid sequence; human polypeptide fragments and their encoding cDNA polynucleotides)

L15 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:273192 HCAPLUS

DOCUMENT NUMBER: 133:295042

TITLE: Selection of an immunogenic and protective epitope of the PsaA protein of Streptococcus pneumoniae using a phage display library

AUTHOR(S): Srivastava, N.; Zeiler, J. L.; Smithson, S. L.; Carlone, G. M.; Adams, E. W.; Sampson, J. S.; Johnson, S. E.; Kieber-Emmons, T.; Westerink, M. A. J.

CORPORATE SOURCE: Department of Medicine, Medical College of Ohio, Toledo, OH, 43614, USA

SOURCE: Hybridoma (2000), 19(1), 23-31

CODEN: HYBRDY; ISSN: 0272-457X

PUBLISHER: Mary Ann Liebert, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Streptococcus pneumoniae is an important pathogen that causes disease in young and elderly individuals. The currently available polysaccharide vaccines have limited efficacy in those age groups most susceptible to pneumococcal infections. This study focuses on mapping the epitopes of a surface protein of S. pneumoniae by biopanning a 15 mer phage display library using 5 different monoclonal antibodies (MAbs) against the Pneumococcal surface adhesin A (PsaA). PsaA is a component of the bacterial cell wall that is highly species specific and is involved in bacterial adherence and virulence. Biopanning of the phage display library reveals three distinct epitopes on the PsaA protein. The sequence homol. of these epitopes ranges from two to six amino acids when compared to the native PsaA protein type 2. Two of these epitopes have been evaluated for their immunogenicity in mice. The peptide selected by the MAbs 8G12, 6F6, and 1B7 is referred to as the consensus peptide and is immunogenic in mice. Optimal anti-PsaA response is obsd. in mice immunized with 50 µg of the consensus peptide complexed to proteosomes in 1:1 ratio. The anti-PsaA response is significantly lower than the response to the PsaA native protein. The peptide selected by the MAb 1B7 is also immunogenic in mice. This form is significantly protective in mice challenged with a lethal dose of serotype 1 when compared to mice immunized with the native protein. These results show that the selected epitopes of PsaA protein are immunogenic and protective in mice. These epitopes need to be evaluated further as alternatives to currently available vaccines.

IT 301300-56-1

BL: BAC Biological activity or effect, except adverse; BCU Biological study, unclassified; THU Therapeutic use; BICL Biological study; USES (Uses)

PsaA protein of Streptococcus pneumoniae in vaccine against streptococcal infections

REFERENCE COUNT: 04 THERE ARE 04 CITED REFERENCES AVAILABLE FOR THIS ENTRY. ALL CITED REFERENCES ARE AVAILABLE FOR P. 0001

115 ANSWER 4 OF 17 HEADINGS REPEATED IN A. W.

ACCESSION NUMBER: 149:199616 HEADLINE

DOCUMENT NUMBER: 131:199616

TITLE: Epitope peptides immunogenic against Streptococcus pneumoniae and their use in vaccines

INVENTOR(S): Carlone, George M.; Ades, Edwin W.; Sampson, Jacquelyn S.; Tharpe, Jean A.; Zeller, Jean Louise; Westerink, Maria Anna Julia

PATENT ASSIGNER(S): The Government of the United States of America, represented by the Secretary, USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KINT | DATE | APPLICATION NO. | DATE |
|------------|--|----------|-----------------|----------|
| WO 9945121 | A1 | 19990910 | WO 1999-US4326 | 19990226 |
| W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, HK, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, ML, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MK, SD, SL, SE, TG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| CA 2326408 | AA | 19990910 | CA 1999-2326408 | 19990226 |
| AU 9927950 | A1 | 19990920 | AU 1999-27950 | 19990226 |
| BR 9908476 | A | 20001205 | BR 1999-8476 | 19990226 |
| EP 1060249 | A1 | 20001220 | EP 1999-908543 | 19990226 |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | |

PRIORITY APPLN. INFO.: US 1998-76566F F 19981302
WO 1999-US4326 W 19990226

AB Peptides are provided which immunospecifically bind to monoclonal antibodies specific for the 37-kDa pneumococcal surface adhesion A protein (PsaA) of Streptococcus pneumoniae of the invention, and that are immunogenic against Streptococcus pneumoniae infection. Also provided are vaccines comprising such immunogenic polypeptides, and methods of conferring protective immunity against Streptococcus pneumoniae infection by administering therapeutic compositions comprising the immunogenic peptides of the invention. Also provided are methods of detecting the presence of Streptococcus pneumoniae in a sample using antibodies or antigens, and methods of preventing and treating Streptococcus pneumoniae infection in a subject. In addn. a phage display method of identifying the sequence of a peptide potentially capable of eliciting protective immunity against a pathogenic microorganism is provided.

IT 241814-51-7P

BL: BICL Biological study; PEP Properties; THU Therapeutic use; BICL Biological study; PEP Preparation; USES Uses

(epitope peptides immunogenic against Streptococcus pneumoniae and their use in vaccines)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS REPORT. ALL CITATIONS AVAILABLE IN THE FE FORMAT

115 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2013 ACS

ACCESSION NUMBER: 1995:487568 HCAPLUS

DOCUMENT NUMBER: 129:76489

TITLE: Heparin- and sulfatide-binding peptides from the type I repeats of human thrombospondin and conjugates thereof for treatment of metastatic tumors and other neovascularization-related diseases

INVENTOR(S): Roberts, David E.; Browning, Philip J.; Bryant, Joseph L.; Iman, John K.; Kautsch, Henry C.; Li, Nenghua

PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA

SOURCE: U.S., 183 pp., Cont.-in-part of U. S. 215,085, abandoned.

CODEN: TUXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5770563 | A | 19980623 | US 1995-487568 | 19950607 |
| US 801812 | A0 | 19921215 | US 1991-801812 | 19911206 |
| US 5357041 | A | 19941018 | | |
| US 6051549 | A | 20000418 | US 1998-41119 | 19980311 |
| PRIORITY APPLN. INFO.: | | | US 1991-801812 | A2 19911206 |
| | | | US 1994-215085 | B2 19940321 |
| | | | US 1995-487568 | A1 19950607 |

OTHER SOURCE(S): MARPAT 129:76489

AB This invention identifies a biol. active group of peptide sequences from Type I repeat units of the extracellular matrix protein, human thrombospondin-1, identical or homologous to the sequence, KRFRQDGGWSHWSPWSSC (SEQ ID NO:30). The biol. activities residing with the full sequences, portions thereof, and variants of the full or partial sequences are disclosed. The invention describes how the activity may be enhanced by covalently linking these peptides to suitable carriers, preferably a branched, water-sol. polymer of low or absent toxicity and immunogenicity, such as polysucrose (Ficoll). The invention describes (1) a method for prepg. such conjugates, (2) the use of the defined peptides or their conjugates in blocking or modifying the action on cellular processes of heparin (e.g., proliferation, adhesion, motility, extravasation and neovascularization), sulfatides, related sulfated glycoconjugates, fibronectin, and basic fibroblast growth factor, involving malignant cell lines and normal endothelial cells. Use of the defined peptides, analogs or peptidomimetics and their conjugates for treatment of metastatic tumors, breast carcinomas, melanomas, Kaposi's sarcomas, hemangiomas, diabetic retinopathies, and various pathol. conditions dependent upon neovascularization is also disclosed.

IT 209457-55-6

RL: BAC (Biological activity or effector, except adverse); BFR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (heparin- and sulfatide-binding peptides from the type I repeats of human thrombospondin and conjugates thereof for treatment of metastatic tumors and other neovascularization-related diseases)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS REPORT. ALL CITATIONS AVAILABLE IN THE FE FORMAT

115 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2013 ACS

ACCESSION NUMBER: 1995:487568 HCAPLUS

DOCUMENT NUMBER: 129:76489

TITLE: A region from the medium chain adaptor subunit (.mu.) recognizes leucine- and tyrosine-based sorting signals

AUTHOR(S): Brennes, Toril; Laurak, Vigdis; Lindqvist, Bjorn; Bakke, Oddmund

CORPORATE SOURCE: Dep. Molecular Cell Biol., Univ. of Oslo, Oslo, Norway

SOURCE: Journal of Biological Chemistry, 1998, 273, 11, 6444-6448

CODEN: JBCHAA; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Tyrosine-based sorting signals in the cytosolic tails of membrane proteins have been found to bind directly to the medium chain subunit (.mu.) of the adaptor complexes AP-1 and AP-2. For the leucine-based signals, an interaction with AP-1 and AP-2 has been reported, but no specific interacting subunit has been demonstrated. After searching for mols. interacting with the leucine-based sorting signals within the cytosolic tail of the major histocompatibility complex class II-assoc. invariant chain using a phage display approach, we identified phage clones with homol. to a conserved region of the AP-1 and AP-2 .mu. chains. To investigate the relevance of these findings, we have expressed regions of mouse .mu.1 and .mu.2 chains on phage gene product III and investigated the binding to tail sequences from various transmembrane proteins with known endosomal targeting signals. Enzyme-linked immunosorbent binding assays showed that these phages specifically recognized peptides contg. functional leucine- and tyrosine-based sorting signals, suggesting that these regions of the .mu.1 and .mu.2 chains interact with both types of sorting signals.

IT 208192-30-7P

RL: BPN (Biosynthetic preparation); BIK (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation); PROC (Process)

(region from medium chain adaptor subunit (.mu.) of AP-1 and AP-2 recognizes leucine- and tyrosine-based sorting signals)

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

115 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2018 ACS

ACCESSION NUMBER: 1998:11596 HCAPLUS

DOCUMENT NUMBER: 128:110913

TITLE: Amino acids within residues 181-200 of the nicotinic acetylcholine receptor .alpha.1 subunit involved in nicotine binding

AUTHOR(S): Lents, Thomas L.; Chaturvedi, Vijaya; Centi-Fine, Bianca M.

CORPORATE SOURCE: Department of Cell Biology, Yale University, 333 Cedar St., New Haven, CT, 06510-3333

SOURCE: Biochemical Pharmacology, 1998, 55, 3, 641-647

CODEN: BPHCA; ISSN: 0006-2952

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Structural determinants of L-[3H]nicotine binding to the sequence flanking Cys 190 and Cys 193 of the Torpedo acetylcholine receptor .alpha.1 subunit were investigated using synthetic peptides (residues 181-200) and fusion proteins (residues 181-200). Nicotine binding at a single concn. (50 nM) was compared with 11 peptides and fusion proteins in which individual amino acids at positions 181-200 were substituted. Substitution of Lys 185, Tyr 187, Lys 190, Cys 193, Thr 196, and Tyr 198 resulted in the greatest redn. in nicotine binding. Equil. binding of [3H]nicotine to peptide 181-200 revealed a binding component with an apparent KD of 1.2

...M. Substitution of Lys 181 with Ala, His 182, Tyr 183, Tyr 184, Tyr 185, Tyr 186, Tyr 187, and Tyr 188 resulted in a significant redn. in affinity. Affinity was not affected significantly by substitution of Arg 189, Lys 188 (with Gly or Arg), Val 189, Tyr 189, Pro 190, Asp 191, Thr 192, and Asp 201. It is concluded that Lys 181, His 182, Tyr 183, Tyr 184, Tyr 185, and Tyr 186 play the greatest role in nicotine binding to residues 181-201 of the .alpha.1 subunit. Previous studies have implicated Tyr 183, Tyr 184, Tyr 185, and Tyr 186 in agonist binding to the acetylcholine receptor. These results confirm a role for these residues and also demonstrate a function for Lys 181 and His 182 in nicotine binding.

IT 201529-09-1

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(181-201 nicotinic receptor .alpha.1-subunit mutant; nicotinic acetylcholine receptor .alpha.1 subunit residues 181-201 in nicotine binding)

115 ANSWER 9 OF 17 HOMBLUS COPYRIGHT 1993 ACS

ACCESSION NUMBER: 1993:93391 HOMBLUS
DOCUMENT NUMBER: 124:114981
TITLE: Isolation and characterization of antibodies which specifically recognize the peptide encoded by exon 7 (v2) of the human CD44 gene
AUTHOR(S): Borgya, A; Woodman, A; Sugiyama, M; Donio, F; Kopetski, E.; Matsumura, Y; Tarin, D
CORPORATE SOURCE: Boehringer Mannheim GmbH, Fensberg, D-61272, Germany
SOURCE: Clinical Molecular Pathology (1993), 48(5), M241-M250
CODEN: CMPAH1; ISSN: 1355-2910
PUBLISHER: BMJ Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Exon 7 of the human CD44 gene is overexpressed in many commonly occurring carcinomas. The aim of the study was to explore the diagnostic and therapeutic potential of this frequent abnormality. A new monoclonal antibody (mAb, M-23.6.1) and a polyclonal antibody (pAb, S-6127) to the corresponding antigen were raised by immunizing mice and sheep, resp., with a specially constructed fusion protein HIV2 (gp32)-CD44 exon 7. Characterization of mAb M-23.6.1 by ELISA, Western blotting, immunocytochem., and FACS anal. confirmed that it specifically recognizes an epitope in the region between amino acids 19 and 33 of the peptide encoded by this exon. Western blotting expts. with two cell lines, RT112 and ZR75-1, known from RT-PCR data to be over-transcribing the exon, yielded a monospecific band of approx. 110 kDa, and immunocytochem. showed discrete membrane staining on the same cell lines. Fluorescent antibody cell sorting (FACS) revealed binding to greater than 90% of the cells of each of these lines. Specificity of recognition of the antigen was shown by inhibition of the precise immunoreactivity typically seen in ELISA and Western blots, by pre-incubation with synthetic exon 7 peptide or fragments of it. The new antibodies will be useful tools for the further anal. of abnormal CD44 isoforms and their clin. implications.

IT 172997-35-2

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(isolation and characterization of monoclonal antibody to peptide encoded by exon 7 of human CD44)

115 ANSWER 9 OF 17 HOMBLUS COPYRIGHT 1993 ACS

ACCESSION NUMBER: 1993:933102 HOMBLUS
DOCUMENT NUMBER: 113:83219
TITLE: Two exons in the human CD44 gene encode a highly conserved peptide sequence in the extracellular domain
AUTHOR(S): Kuznetsov, S.; Jensen, S. S.; Borst, L.

AUTHOR: Fuchs, Sara
 CORPORATE SOURCE: Dep. Chemical Immunology, Weizmann Inst. Science,
 Rehovot, 76100, Israel
 SOURCE: Proceedings of the National Academy of Sciences of the
 United States of America 1997, 94 13, 1191-5
 CODEN: PNASA6; ISSN: 0027-8424
 PUBLISHER: National Academy of Sciences
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The ligand binding site of the nicotinic acetylcholine receptor (AChR) is localized in the .alpha.-subunit within a small region, the so-called Cys-182 and -197. By analyzing the binding-site region of AChR in animal species that are resistant to .alpha.-neurotoxins, the authors have previously shown that for residues in this region, at positions 187, 189, 194, and 197, differ between animals sensitive (e.g., mouse) and resistant (e.g., mongoose and snake) to .alpha.-bungarotoxin (.alpha.-BTX). In the present study, the authors performed site-directed mutagenesis on a fragment of the mongoose AChR .alpha.-subunit (residues 122-205) and exchanged residues 187, 189, 194, and 197, either alone or in combination, with those present in the mouse .alpha.-subunit sequence. Only the mongoose fragment in which all four residues were mutated to the mouse ones exhibited .alpha.-BTX binding similar to that of the mouse fragment. The mongoose double mutation in which Leu-194 and His-197 were replaced with proline residues, which are present at these positions in the mouse AChR and in all other toxin binders, bound .alpha.-BTX to .apprx.60% of the level of binding exhibited by the mouse fragment. In addn., replacement of either Pro-194 or -197 in the mouse fragment with serine and histidine, resp., markedly decreased .alpha.-BTX binding. All other mutations resulted in no or just a small increase in .alpha.-BTX binding. These results have led the authors' to propose two subsites in the binding domain for .alpha.-BTX: the proline subsite, which includes Pro-194 and -197 and is crit. for .alpha.-BTX binding, and the arom. subsite, which includes amino acid residues 187 and 189 and det. the extent of .alpha.-BTX binding.

IT 170662-94-9, EARGWKHWVFYACCLTTHYLD 170662-98-3,
 EARGWKHWVFYACCPPTHYLD 170662-99-4, EARGWKHWVFYACCLTTPYLD
 170663-00-0, EARGWKHWVFYACCPPTHYLD

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
 (mongoose nicotinic receptor .alpha.-subunit binding domain mutant contg.; nicotinic receptor .alpha.-subunit .alpha.-bungarotoxin-binding domain arom. subsite and proline subsite)

IT 170663-01-1, EARGWKHWVFYSCCPPTHYLD

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
 (mouse nicotinic receptor .alpha.-subunit binding domain contg.; nicotinic receptor .alpha.-subunit .alpha.-bungarotoxin-binding domain arom. subsite and proline subsite)

IT 170663-02-2, EARGWKHWVFYSCWPTTPYLD 170663-03-3,
 EARGWKHWVFYSCSTTPYLD 170663-04-4, EARGWKHWVFYSCCPPTHYLD

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
 (mouse nicotinic receptor .alpha.-subunit binding domain mutant contg.; nicotinic receptor .alpha.-subunit .alpha.-bungarotoxin-binding domain arom. subsite and proline subsite)

L15 ANSWER 11 OF 17 HARVARD COPYRIGHT 2003 ADS

ACCESSION NUMBER: 1994:01617 HARVARD

DOCUMENT NUMBER: 121:233199

TITLE: Profile of the regions of acetylcholine receptor .alpha. chain recognized by T-lymphocytes and by antibodies in EAMG-susceptible and non-susceptible mouse strains after different periods of immunization.

[illegible]

357B170 B6 mice develop a neuromuscular disease, exp1. autoimmune myasthenia gravis (EAMG), after .gtoreq.2 immunizations with Torpedo californica acetylcholine receptor (AChR). To det. whether EAMG is related to recognition of particular region(s) on the main extracellular domain of the .alpha. chain (residues .alpha. 1-210) in prolonged immunization, the authors have examd. the differences in the antibody and T cell recognition profiles of B6 and SJL a strain that does not develop EAMG mice after different periods and a no. of immunization with Torpedo AChR. In a given strain, antibodies and T cells recognized immunodominant regions, which may coincide or may be uniquely B cell or T cell determinants. Both B6 and SJL exhibited similar antibody recognition profiles after the 2nd and through the 4th immunizations with AChR. Major differences between the 2 strains were 1 and in their T cell recognition of regions in the second part (residues 100-210) of the main extracellular domain of the .alpha. chain. T cells of SJL recognized consistently only one region (111-126) within this part of the .alpha. chain, whereas in B6, T cell recognition of 3 peptides (111-126, 146-162, and 182-198) and next neighbor regions to them persisted throughout the period. Of these 3 peptides, 146-162 was an immunodominant peptide unique to B6, as the other 2 peptides (111-126 and 182-198) were also recognized by either T cells or antibodies in SJL. To study the role of T cells recognizing region 146-162 in EAMG, a T cell line was generated against this region and the cells transferred into B6 mice followed by one Torpedo AChR injection. Enhancement of antibody prodn. toward .alpha. chain peptides was obsd. as an influence of T cell transfer compared to profiles at 1 wk. In addn., 1 out of 3 mice examd. showed signs of EAMG. These results suggest the importance of T cells recognizing residues 146-162 in EAMG. Thus, the presence of persistent T cell responses to the second half (residues 100-210) of the main extracellular domain of the .alpha. chain is assocd. with the development of EAMG in B6 mice, while absence of these responses in SJL mice may enable them to escape the disease. The preservation of the immunodominance of peptide 146-162 in the T cell response in B6 is probably most important for the pathogenesis of EAMG in this strain.

II 157960-63-9

RL: BIOC (Biological studies)

(in B- and T-cell epitope mapping on acetylcholine receptor .alpha. chain, autoimmune myasthenia gravis in relation to)

L15 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994.01.0025 11749109

DECEMBER 1997

TITLE: Diagnosis of tumors by assay of CD44 signaling patterns

[illegible]

ENTERPRISE SOLUTIONS: IBM Innovation Ltd., UK

SOURCE: PCT Int. Appl., 41 pp.

CODEN: FENXPD

COMMENTARY

LANGUAGE: English

FRANK A. CO. 1944. 1945. 1946. 1947. 1948. 1949. 1950. 1951. 1952. 1953. 1954. 1955. 1956. 1957. 1958. 1959. 1960. 1961. 1962. 1963. 1964. 1965. 1966. 1967. 1968. 1969. 1970. 1971. 1972. 1973. 1974. 1975. 1976. 1977. 1978. 1979. 1980. 1981. 1982. 1983. 1984. 1985. 1986. 1987. 1988. 1989. 1990. 1991. 1992. 1993. 1994. 1995. 1996. 1997. 1998. 1999. 2000. 2001. 2002. 2003. 2004. 2005. 2006. 2007. 2008. 2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056. 2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104. 2105. 2106. 2107. 2108. 2109. 2110. 2111. 2112. 2113. 2114. 2115. 2116. 2117. 2118. 2119. 2120. 2121. 2122. 2123. 2124. 2125. 2126. 2127. 2128. 2129. 2130. 2131. 2132. 2133. 2134. 2135. 2136. 2137. 2138. 2139. 2140. 2141. 2142. 2143. 2144. 2145. 2146. 2147. 2148. 2149. 2150. 2151. 2152. 2153. 2154. 2155. 2156. 2157. 2158. 2159. 2160. 2161. 2162. 2163. 2164. 2165. 2166. 2167. 2168. 2169. 2170. 2171. 2172. 2173. 2174. 2175. 2176. 2177. 2178. 2179. 2180. 2181. 2182. 2183. 2184. 2185. 2186. 2187. 2188. 2189. 2190. 2191. 2192. 2193. 2194. 2195. 2196. 2197. 2198. 2199. 2200. 2201. 2202. 2203. 2204. 2205. 2206. 2207. 2208. 2209. 2210. 2211. 2212. 2213. 2214. 2215. 2216. 2217. 2218. 2219. 2220. 2221. 2222. 2223. 2224. 2225. 2226. 2227. 2228. 2229. 2230. 2231. 2232. 2233. 2234. 2235. 2236. 2237. 2238. 2239. 2240. 2241. 2242. 2243. 2244. 2245. 2246. 2247. 2248. 2249. 2250. 2251. 2252. 2253. 2254. 2255. 2256. 2257. 2258. 2259. 2260. 2261. 2262. 2263. 2264. 2265. 2266. 2267. 2268. 2269. 2270. 2271. 2272. 2273. 2274. 2275. 2276. 2277. 2278. 2279. 2280. 2281. 2282. 2283. 2284. 2285. 2286. 2287. 2288. 2289. 2290. 2291. 2292. 2293. 2294. 2295. 2296. 2297. 2298. 2299. 2300. 2301. 2302. 2303. 2304. 2305. 2306. 2307. 2308. 2309. 2310. 2311. 2312. 2313. 2314. 2315. 2316. 2317. 2318. 2319. 2320. 2321. 2322. 2323. 2324. 2325. 2326. 2327. 2328. 2329. 2330. 2331. 2332. 2333. 2334. 2335. 2336. 2337. 2338. 2339. 2340. 2341. 2342. 2343. 2344. 2345. 2346. 2347. 2348. 2349. 2350. 2351. 2352. 2353. 2354. 2355. 2356. 2357. 2358. 2359. 2360. 2361. 2362. 2363. 2364. 2365. 2366. 2367. 2368. 2369. 2370. 2371. 2372. 2373. 2374. 2375. 2376. 2377. 2378. 2379. 2380. 2381. 2382. 2383. 2384. 2385. 2386. 2387. 2388. 2389. 2390. 2391. 2392. 2393. 2394. 2395. 2396. 2397. 2398. 2399. 2400. 2401. 2402. 2403. 2404. 2405. 2406. 2407. 2408. 2409. 2410. 2411. 2412. 2413. 2414. 2415. 2416. 2417. 2418. 2419. 2420. 2421. 2422. 2423. 2424. 2425. 2426. 2427. 2428. 2429. 2430. 2431. 2432. 2433. 2434. 2435. 2436. 2437. 2438. 2439. 2440. 2441. 2442. 2443. 2444. 2445. 2446. 2447. 2448. 2449. 2450. 2451. 2452. 2453. 2454. 2455. 2456. 2457. 2458. 2459. 2460. 2461. 2462. 2463. 2464. 2465. 2466. 2467. 2468. 2469. 2470. 2471. 2472. 2473. 2474. 2475. 2476. 2477. 2478. 2479. 2480. 2481. 2482. 2483. 2484. 2485. 2486. 2487. 2488. 2489. 2490. 2491. 2492. 2493. 2494. 2495. 2496. 2497. 2498. 2499. 2500. 2501. 2502. 2503. 2504. 2505. 2506. 2507. 2508. 2509. 2510. 2511. 2512. 2513. 2514. 2515. 2516. 2517. 2518. 2519. 2520. 2521. 2522. 2523. 2524. 2525. 2526. 2527. 2528. 2529. 2530. 2531. 2532. 2533. 2534. 2535. 2536. 2537. 2538. 2539. 2540. 2541. 2542. 2543. 2544. 2545. 2546. 2547. 2548. 2549. 2550. 2551. 2552. 2553. 2554. 2555. 2556. 2557. 2558. 2559. 2560. 2561. 2562. 2563. 2564. 2565. 2566. 2567. 2568. 2569. 2570. 2571. 2572. 2573. 2574. 2575. 2576. 2577. 2578. 2579. 2580. 2581. 2582. 2583. 2584. 2585. 2586. 2587. 2588. 2589. 2590. 2591. 2592. 2593. 2594. 2595. 2596. 2597. 2598. 2599. 2600. 2601. 2602. 2603. 2604. 2605. 2606. 2607. 2608. 2609. 2610. 2611. 2612. 2613. 2614. 2615. 2616. 2617. 2618. 2619. 2620. 2621. 2622. 2623. 2624. 2

[illegible]

| PRESENT NAME | NAME | DATE | APPROXIMATE NAME | DATE |
|---------------|------|--------|------------------|-----------|
| W. H. L. H. 3 | AL | 1941-4 | N. 1944-1947 | 1948-1949 |
| B. 52, 51, 50 | | | | |

BW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
 EP 011821 A1 19940817 EP 1993-016109 19930721
 EP 051822 B1 19960417
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
 JP 04810781 T2 19961131 JP 1993-014278 19930721
 JP 0410851 B1 19941921
 AT 136040 E 19960815 AT 1993-011114 19931114
 EP 0411071 A1 19941214 EP 1993-011114 19931114

W: CA, JP, US

BW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
 CA 2149637 A1 19941214 CA 1993-114963 19931114
 EP 072107 A1 19940817 EP 1994-011245 19931121
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
 US 5531646 A 19961115 US 1993-076284 19930417
 US 5579899 A 19970319 US 1993-028113 19930517

PRIORITY APPLN. INFO.:

GB 1992-15448 19920721
 JP 1992-04344 19921127
 GB 1992-26165 19921216
 WO 1993-GB1520 19930720
 WO 1993-GB2394 19931122

AB There is marked over-expression of multiple spliced variants of the CD44 gene in tumor compared to counterpart normal tissue. This observation forms the basis of a method of diagnosing neoplasia by anal. of a sample of body tissue or body fluid or waste product. A new exon 6, of 129 bp, has been found and sequenced, and is claimed as such and for use in the diagnostic method. Samples of breast tumors were assayed for CD44 mRNA by reverse transcription/PCR using primers to detect hemopoietic CD44 followed by hybridization with a probe from exon 4. A no. of splice variants were found in neoplastic tissue that were absent from normal tissue, this was found in all patients tested. There was a difference in splice patterns between neoplastic and non-neoplastic diseased tissues (cystic disease). Similar results were found in colon cancer using biopsy and stool samples and in bladder cancer using urine samples for diagnosis.

IT 155216-25-4

RL: PRF Properties

(amino acid sequence of, in neoplastic tissue, altered splicing patterns in neoplastic tissue in relation to)

L15 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:564926 HCAPLUS

DOCUMENT NUMBER: 117:164026

TITLE: Species- and subtype-specific recognition by antibody WF6 of a sequence segment forming an .alpha.-bungarotoxin binding site on the nicotinic acetylcholine receptor .alpha. subunit

AUTHOR(S): Molane, K. E.; Fritzen, M.; Wu, X.; Diethelm, B.; Maelicke, A.; Centi-Tronconi, B. M.

CORPORATE SOURCE: Coll. Biol. Sci., Univ. Minnesota, St. Paul, MN, 55108, USA

SOURCE: Journal of Receptor Research 11(4), 113, 1991-92
 CODEN: JRRDXX; ISSN: 1040-0144

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The monoclonal antibody WF6 competes with acetylcholine and .alpha.-bungarotoxin (.alpha.-BGT) for binding to the Torpedo nicotinic acetylcholine receptor (nAChR) .alpha.1 subunit. By using synthetic peptides corresponding to the complete Torpedo nAChR .alpha.1 subunit, the authors previously mapped a continuous epitope recognized by WF6, and the prototype for .alpha.-BGT, to the sequence segment .alpha.1.161-277. Single amino acid substitution analogs have been used as an initial approach to test the crit. amino acids for WF6 and .alpha.-BGT binding. In the present study, the authors continue the anal. of the structural features of the WF6 epitope by comparing its cross-reactivity with

synthetic peptides corresponding to the .alpha.1 subunit of the muscle nAChRs of different species, the rat brain .alpha.1, .alpha.2, .alpha.3 and .alpha.7 nAChR subtypes, and the chick brain .alpha.1 and .alpha.2 protein subunits, .alpha.1P10H1 .alpha.1 and .alpha.1P10H1 .alpha.1. The results indicate that WF6 is able to cross-react with the muscle .alpha.1 subunits of different species by virtue of conservation of several critical amino acid residues between positions 181-195 of the .alpha.1 subunit. These studies further define the essential structural features of the sequence segment .alpha.1 (181-200) required to form the epitope for WF6.

17 133295-54-2 133322-53-9

RL: Hill Biological study

antibody : nicotinic receptor : bungarotoxin binding site binding by, structure in relation to)

115 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:223857 HCAPLUS

DOCUMENT NUMBER: 114:223857

TITLE: Structural determinants of .alpha.-bungarotoxin binding to the sequence segment 181-200 of the muscle nicotinic acetylcholine receptor .alpha.1 subunit: effects of cysteine-192 and -193 and species-specific amino acid substitutions

AUTHOR(S): McLane, Kathryn E.; Wu, Xiadong; Diehelm, Brenda; Conti-Tronconi, Bianca M.

CORPORATE SOURCE: Coll. Biol. Sci., Univ. Minnesota, St. Paul, MN, 55108, USA

SOURCE: Biochemistry (1991), 30(20), 4925-34
CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The sequence segment 181-200 of the Torpedo nicotinic acetylcholine receptor (nAChR) .alpha. subunit forms a binding site for .alpha.-bungarotoxin (.alpha.-BTX). Synthesis peptides corresponding to the homologous sequences of human, calf, mouse, chicken, frog, and cobra muscle nAChR .alpha.1 subunits were tested for their ability to bind 125I-.alpha.-BTX, and differences in .alpha.-BTX affinity were detd. by using soln. (IC50) and a solid-phase (Kd) assays. Panels of overlapping peptides corresponding to the complete .alpha.1 subunit of mouse and human were also tested for .alpha.-BTX binding, but other sequence segments forming the .alpha.-BTX site were not consistently detectable. The Torpedo .alpha.1(181-200) and the homologous frog and chicken peptides bound .alpha.-BTX with higher affinity (Kd .apprx. 1-2 .mu.M), IC50 .apprx. 1-2 .mu.M than the human and calf peptides (Kd .apprx. 3-5 .mu.M, IC50 .apprx. 15 .mu.M). The mouse peptide bound .alpha.-BTX weakly when attached to a solid support (Kd .apprx. 5 .mu.M) but was effective in competing for 125I-.alpha.-BTX in soln. (IC50 .apprx. 1 .mu.M). The cobra nAChR .alpha.1-subunit peptide did not detectably bind .alpha.-BTX in either assay. Amino acid substitutions were correlated with .alpha.-BTX binding activity of peptides from different species. The role of a putative vicinal disulfide bond between cysteine-192 and -193, relative to the Torpedo sequence, was detd. by modifying the peptides with sulfhydryl reagents. Reim. and alkylation of the peptides decreased .alpha.-BTX binding, whereas oxidn. of the peptides had little effect. Modifications of the cysteine-cysteine residues of the cobra peptide failed to induce .alpha.-BTX binding activity. Thus, while the adjacent cysteines are likely to be involved in forming the toxin .alpha.1-subunit interface a vicinal disulfide bond was not required for .alpha.-BTX binding.

17 133295-54-2P 133322-53-9P

RL: SPN (Synthetic preparation); FREEF (Preparation)

(prepn. and .alpha.-bungarotoxin binding by, toxin binding site of nicotinic acetylcholine receptor .alpha. subunit in relation to)

17 133295-53-1P

RL: SPN (Synthetic preparation); FREEF (Preparation)

114753-46-7

114753-46-7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:525235 HCAPLUS

DOCUMENT NUMBER: 114753-46-7

TITLE: Interaction of a snake venom protein with a sequence from the acetylcholine receptor .alpha.-subunit

AUTHOR(S): Bothner-By, Anne L.; Mishra, P. K.; Low, Barbara W.

CORPORATE SOURCE: Dep. Chem., Carnegie Mellon Univ., Pittsburgh, PA, 15213, USA

SOURCE: UCLA Symposia on Molecular and Cellular Biology, New Series 1997, 1-2 Front. NMR Mol. Biol., 1-2
CODEN: USMMD; ISSN: 1044-048X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB .alpha.-Cobratoxin and acetylcholine receptor .alpha.-subunit complementary binding domain peptide (residues 173-181) were studied by 1-D and 2-D NMR spectroscopy. A model for binding is proposed.

IT 114753-46-7

RL: BIOC (Biological study)

(.alpha.-cobratoxin binding by, conformation in, NMR study of)

114753-46-7 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:516189 HCAPLUS

DOCUMENT NUMBER: 109:106189

TITLE: Binding of .alpha.-bungarotoxin to synthetic peptides corresponding to residues 173-204 of the .alpha. subunit of Torpedo, calf, and human acetylcholine receptor and restoration of high-affinity binding by sodium dodecyl sulfate

AUTHOR(S): Wilson, Paul T.; Lents, Thomas L.

CORPORATE SOURCE: Sch. Med., Yale Univ., New Haven, CT, 06510, USA

SOURCE: Biochemistry, 1997, 36(12), 3551-3554

CODEN: BICHA; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To investigate structure-function relations of a segment of the acetylcholine receptor .alpha. subunit, binding of .alpha.-bungarotoxin to synthetic peptides corresponding to residues 173-204 of Torpedo, calf, and human .alpha. subunits was compared using a solid-phase radioassay. The affinities of 125I-labeled .alpha.-bungarotoxin for the calf and human peptides were 15- and 150-fold less, resp., than for the Torpedo peptide. On the basis of nonconservative substitutions in the calf and human sequences, arom. residues (Tyr-181, Trp-187, and Tyr-189) are important for the higher affinity binding of the Torpedo peptide. Substitution of neg. charged Glu-180 with uncharged Gln in the calf peptide did not significantly affect toxin binding, indicating Glu-180 alone does not comprise the anionic subsite on the receptor to which the cationic quaternary ammonium groups of cholinergic agents bind. d-Tubocurarine competed with toxin binding to the modified calf 40-mer which lacks Glu-180 and Asp-198 present in Torpedo. Thus, the an. subsite could be formed by another neg. charged residue or by an amino acid side chain. It is possible that the pos. charges on cholinergic ligands are countered by a neg. electrostatic potential provided by polar groups, such as the hydroxyl group of tyrosine, present in several residues in this region, and the neg. charges present on any of residues 175, 181, 187, or 189. Equil. satn. binding of .alpha.-bungarotoxin to Torpedo peptide 173-184 revealed a minor binding component with an apparent K_D of 1.1 nM and a major component with a K_D of 60 nM. In the presence of 1.0 mM SDS, a binding component with a K_D of 1.9 nM was detected. This compares with an affinity of K_D = 0.41 nM for toxin binding to native acetylcholine receptor in the solid-phase assay. SDS may stabilize a conformation of the peptide that is conducive to high-affinity binding.

IT 115826-29-4 115826-30-7

RL: B10L (Biological study)

(bungarotoxin binding + , nicotinic receptor binding in relation to

L15 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1988:4 1071 HCAPLUS

DOCUMENT NUMBER: 100:1071

TITLE: .alpha.-Toxin binding to acetylcholine receptor
.alpha.179-191 peptide-s: intrinsic fluorescence
studies

AUTHOR(S): Eddings, W.; Corfield, E. W. R.; Levinson, L. S.;
Hashim, G. A.; Low, P. W.

CORPORATE SOURCE: Howard Hughes Inst., Columbia Univ., New York, NY,
10032, USA

SOURCE: FEBS Letters (1988), 231(1), 212-16

CODEN: FEBIAL; ISSN: 0014-5793

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Interactions between 2 .alpha.-toxins and the synthetic peptides
.alpha.179-191 from both calf and human acetylcholine receptor
.alpha.-subunit sequences were studied by measurements of quenching of
intrinsic fluorescence after toxin addn. Dissoen. consts. of .apprx.5
.times. 10⁻⁸M for binding of calf peptide by both .alpha.-cobrotoxin and
erabutoxin a were estd. The binding of .alpha.-cobrotoxin to calf
peptide, which leads to marked quenching of fluorescence intensity, is
inhibited by a 10⁻⁴M excess of acetylcholine. The human .alpha.179-191
peptide binds to .alpha.-cobrotoxin, but not, under comparable conditions,
to erabutoxin a.

IT 114753-46-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, of calf acetylcholine receptor .alpha.-subunits, and
.alpha.-toxins binding by)

L15 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1984:185956 HCAPLUS

DOCUMENT NUMBER: 100:185956

TITLE: A super active cyclic hexapeptide analog of
somatostatin

AUTHOR(S): Veber, Daniel F.; Saperstein, Richard; Nutt, Ruth F.;
Freidinger, Roger M.; Brady, Stephen F.; Curley, Paul;
Perlow, Debra S.; Paleveda, William J.; Colton, C.
Dyllion; et al.

CORPORATE SOURCE: Merck Sharp and Dohme Res. Lab., West Point, PA,
19380, USA

SOURCE: Life Sciences (1984), 34 14, 1011-

CODEN: LIFSAK; ISSN: 0194-0114

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Cyclo(N-methyl-Ala-Tyr-D-Trp-Lys-Val-Phe) (I) [81373-02-8] was
50-100-fold more potent than cyclic somatostatin [34916-34-6] for the
inhibition of insulin [9004-10-8], glucagon [9007-92-5] and growth
hormone [9011-71-6] release as revealed by structure-activity studies of
cyclic hexapeptide analogs of somatostatin in rats. The hydroxyl group of
tyrosine conferred a 10-fold enhancement to the potency. Potency was also
correlated with hydrophobicity. I improved the control of postprandial
hyperglycemia in diabetic animals when given in combination with insulin.
The analog was quite stable in the blood and in the gastrointestinal
tract, but the bioavailability after oral administration was only 1-3%.
The phys. properties and long duration of I should allow clin. evaluation
of the inhibition of glucagon release as an adjunct to insulin in the
treatment of patients with diabetes.

IT 89808-58-2

RL: B10L (Biological study)

SmartSelect: Selection Inhibition by Structure in relation to:

=> select hit rn 112 1-17
E4 THROUGH E28 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 13:34:27 ON 12 FEB 2003
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DICTIONARY FILE UPDATES: 12 FEB 2003 HIGHEST RN 489398-83-1

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Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP
PROPERTIES for more information. See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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1 114753-46-7/BI
(114753-46-7/RN)
1 133299-54-1/BI
(133299-54-1/RN)
1 133322-53-9/BI
(133322-53-9/RN)
1 115826-29-4/BI
(115826-29-4/RN)
1 115826-30-7/BI
(115826-30-7/RN)
1 133295-53-1/BI
(133295-53-1/RN)
1 158216-25-4/BI
(158216-25-4/RN)
1 157960-63-9/BI
(157960-63-9/RN)
1 170662-94-9/BI
(170662-94-9/RN)
1 170662-98-3/BI
(170662-98-3/RN)
1 170662-99-4/BI
(170662-99-4/RN)
1 170662-99-5/BI
(170662-99-5/RN)
1 170662-99-6/BI
(170662-99-6/RN)
1 170662-99-7/BI
(170662-99-7/RN)
1 170662-99-8/BI
(170662-99-8/RN)
1 170662-99-9/BI
(170662-99-9/RN)
1 170662-99-10/BI
(170662-99-10/RN)
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(170662-99-12/RN)
1 170662-99-13/BI
(170662-99-13/RN)

156

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416

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SOL.

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256

214

L-tyrosinyl-L-prolyl-L-threonyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-leucyl-L-phenylalanyl-L-tryptophyl-L-lysyl-L-arginyl-L-tryptophylglycyl-L-phenylalanyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 3441: FN: W0164435 SEQID: 46883 claimed protein
 CN Protein (human clone W0164435-SEQID-26885 fragment)

SQL 47

RN 432700-32-8 REGISTRY

SQL 47

SEQ 1 ULTRALONG W0164435 LPSOM TYPE ALN:OFFFL W0164435

HITS AT: 41-46

REFERENCE 1: 147:1515

L16 ANSWER 3 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 301300-56-1 REGISTRY

CN L-Tyrosine, N-(1-oxohexadecyl)-L-threonyl-L-valyl-L-arginyl-L-seryl-L-valyl-L-prolyl-L-tryptophyl-L-threonyl-L-alanyl-L-tryptophyl-L-alanyl-L-phenylalanyl-L-histidylglycyl- (9CI) (CA INDEX NAME)

NTE modified

| type | location | description |
|--------------|----------|---------------------|
| modification | Thr-1 | 1-oxohexadecyl<Pal> |

SQL 15

RN 301300-56-1 REGISTRY

SQL 15

SEQ 1 TVRSVPWTAW AFHGY

=====

HITS AT: 7-12

REFERENCE 1: 145:244-42

L16 ANSWER 4 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 241814-51-7 REGISTRY

CN L-Tyrosine, L-threonyl-L-valyl-L-seryl-L-arginyl-L-valyl-L-prolyl-L-tryptophyl-L-threonyl-L-alanyl-L-tryptophyl-L-alanyl-L-phenylalanyl-L-histidylglycyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1: FN: W00204497 SEQID: 5 claimed protein

SQL 15

RN 241814-51-7 REGISTRY

SQL 15

SEQ 1 TVSRVPWTAW AFHGY

=====

HITS AT: 7-12

REFERENCE 1: 147:107904

REFERENCE 2: 136:117369

REFERENCE 3: 131:198416

L16 ANSWER 1 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 209457-55-6 REGISTRY

CN L-Serine, L-lysyl-L-asparaginyl-L-phenylalanyl-L-lysyl-L-alutarginyl-L-alanine-asparaginylglycylglycyl-L-tryptophyl-L-seryl-L-histidyl-L-tryptophyl-L-threonyl-L-phenylalanyl-L-tryptophyl-L-seryl- (9CI) (CA INDEX NAME)

SQL 17
 RN 209457-55-6 REGISTRY
 SQL 17

CH. 1 KBFK,13WWT HUNFMAN

HITS AT: 4-14

REFERENCE 1: 129:70488

L16 ANSWER 6 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 208192-30-7 REGISTRY

CN Glycine, L-alanyl-L-.alpha.-aspartylglycyl-L-alanyl-L-tryptophyl-L-phenylalanyl-L-seryl-L-tryptophylglycyl-L-phenylalanyl-L-prolyl-L-glutaryl-L-tryptophyl-L-tryptophylglycyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)

SQL 18

RN 208192-30-7 REGISTRY

SQL 18

SEQ 1 ADGAWFSWGF PQWWSAAG

=====

HITS AT: 5-10

REFERENCE 1: 129:91863

L16 ANSWER 7 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 201529-09-1 REGISTRY

CN L-Aspartic acid, L-tyrosyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-threonyl-L-cysteinyl-L-cysteinyl-L-prolyl-L-.alpha.-aspartyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 20

RN 201529-09-1 REGISTRY

SQL 20

SEQ 1 YRGWKHWVFT TCCPDTFYLD

=====

HITS AT: 4-9

REFERENCE 1: 128:110913

L16 ANSWER 8 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 172997-35-2 REGISTRY

CN L-Lysinamide, L-threonyl-L-tryptophyl-L-.alpha.-aspartyl-L-tryptophyl-L-phenylalanyl-L-seryl-L-tryptophyl-L-leucyl-L-phenylalanyl-L-lysyl-L-prolyl-L-seryl-L-.alpha.-glutaryl-L-seryl- (9CI) (CA INDEX NAME)

NTE modified

| type | location | description |
|---------------|----------|------------------|
| terminal mod. | Lys-15 | C-terminal amide |

SQL 15

RN 172997-35-2 REGISTRY

SQL 15

SEQ 1 TNDWFSWLEF FSESK

=====

HITS AT: 4-9

REFERENCE 1: 104:114414

L16 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2003 ACS

RN 170663-04-4 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-cysteinyl-L-cysteinyl-L-prolyl-L-threonyl-L-threonyl-L-histidyl-L-tyrosyl-L-lysyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170663-04-4 REGISTRY

SQL 21

SEQ 1 EARGWKHWVF YSCCPTTHYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 10 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 170663-03-3 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-cysteinyl-L-cysteinyl-L-seryl-L-threonyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170663-03-3 REGISTRY

SQL 21

SEQ 1 EARGWKHWVF YSCCSTTFYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 11 OF 26 REGISTRY COPYRIGHT 2003 ACS

RN 170663-02-2 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-cysteinyl-L-tryptophyl-L-prolyl-L-threonyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170663-02-2 REGISTRY

SQL 21

SEQ 1 EARGWKHWVF YSCWETTFYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 12 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 170663-01-1 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-cysteinyl-L-cysteinyl-L-prolyl-L-threonyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170663-01-1 REGISTRY

SQL 21

SEQ 1 EARGWKHWVF YSCWETTFYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2003 ACS

RN 170663-00-0 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-alanyl-L-cysteinyl-L-cysteinyl-L-prolyl-L-threonyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170663-00-0 REGISTRY

SQL 21

SEQ 1 EARGKKHWWF YACPTTTHYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2003 ACS

RN 170662-99-4 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-alanyl-L-cysteinyl-L-cysteinyl-L-leucyl-L-threonyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170662-99-4 REGISTRY

SQL 21

SEQ 1 EARGKKHWWF YACPTTTHYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 15 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 170662-98-3 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-alanyl-L-cysteinyl-L-cysteinyl-L-prolyl-L-threonyl-L-threonyl-L-histidyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170662-98-3 REGISTRY

SQL 21

SEQ 1 EARGKKHWWF YACPTTTHYL D

=====

HITS AT: 5-10

REFERENCE 1: 123:330219

L16 ANSWER 16 OF 25 REGISTRY COPYRIGHT 2003 ACS

RN 170662-94-9 REGISTRY

CN L-Aspartic acid, L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-alanyl-L-cysteinyl-L-cysteinyl-L-leucyl-L-threonyl-L-threonyl-L-histidyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

SQL 21

RN 170662-94-9 REGISTRY

SQL 21

SEQ 1 EARGKKHWWF YACPTTTHYL D

=====

HITS AT: 5-10

REFERENCE 1: 113:631214

L16 ANSWER 17 OF 24 REGISTRY COPYRIGHT 2003 ACS
 RN 157960-63-9 REGISTRY
 CN L-Tyrosine, L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-cysteinyl-L-cysteinyl-L-prolyl-L-threonyl-L-threonyl-L-prolyl- (9CI) (CA INDEX NAME)
 SQL 17
 RN 157960-63-9 REGISTRY
 SQL 17

SEQ 1 RGWKHWVFYD CQPTTFY
 =====
 HITS AT: 3-8

REFERENCE 1: 121:203199

L16 ANSWER 18 OF 25 REGISTRY COPYRIGHT 2003 ACS
 RN 155216-25-4 REGISTRY
 CN L-Alanine, L-threonyl-L-leucyl-L-methionyl-L-seryl-L-threonyl-L-seryl-L-alanyl-L-threonyl-L-alanyl-L-threonyl-L-.alpha.-glutamyl-L-threonyl-L-alanyl-L-threonyl-L-lysyl-L-arginyl-L-glutaminyl-L-.alpha.-glutamyl-L-threonyl-L-tryptophyl-L-.alpha.-aspartyl-L-tryptophyl-L-phenylalanyl-L-seryl-L-tryptophyl-L-leucyl-L-phenylalanyl-L-leucyl-L-prolyl-L-seryl-L-.alpha.-glutamyl-L-seryl-L-lysyl-L-asparaginyll-L-histidyl-L-leucyl-L-histidyl-L-threonyl-L-threonyl-L-threonyl-L-glutaminyl-L-methionyl- (9CI) (CA INDEX NAME)

OTHER NAMES:
 CN Antigen CD 44 (human exon 6)
 SQL 43
 RN 155216-25-4 REGISTRY
 SQL 43

SEQ 1 TLMSTSATAT ETATKRQETW DWFSWLFPLS ESKNHLHTTT QMA
 =====
 HITS AT: 22-27

RELATED SEQUENCES AVAILABLE WITH SW/LINK

REFERENCE 1: 117:618414

L16 ANSWER 19 OF 25 REGISTRY COPYRIGHT 2003 ACS
 RN 133322-53-9 REGISTRY
 CN L-Aspartic acid, L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-seryl-L-cysteinyl-L-cysteinyl-L-prolyl-L-threonyl-L-threonyl-L-prolyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)
 SQL 20
 RN 133322-53-9 REGISTRY
 SQL 20

SEQ 1 ARGWKHWVFY SCQPTTFYLD
 =====
 HITS AT: 4-9

REFERENCE 1: 117:104011

REFERENCE 1: 114:116111

L16 ANSWER 21 OF 25 REGISTRY COPYRIGHT 2003 ACS
 RN 133295-54-2 REGISTRY
 CN L-Aspartic acid, L-seryl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-alanyl-L-cysteinyl-L-

cysteinyll-L-prolyll-L-seryll-L-threonyll-L-prolyll-L-tyrosyll-L-leucyll- 901
 (CA INDEX NAME)
 SQL 20
 RN 133295-54-2 REGISTRY
 SQL 20

SEQ 1 ESSEWNNWFFY AHHNNWVLL

HITS AT: 4-9

REFERENCE 1: 113:164006

REFERENCE 2: 114:223457

L16 ANSWER 21 OF 25 REGISTRY COPYRIGHT 2013 ACS
 RN 133295-53-1 REGISTRY
 CN L-Serine, L-.alpha.-glutamyl-L-serylglycyl-L-.alpha.-glutamyl-L-tryptophyl-L-valyl-L-isoleucyl-L-lysyl-L-.alpha.-glutamyl-L-alanyl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl- (PCI) (CA INDEX NAME)
 SQL 20
 RN 133295-53-1 REGISTRY
 SQL 20

SEQ 1 ESSEWNNWFFY AHHNNWVLL

HITS AT: 13-18

REFERENCE 1: 114:223867

L16 ANSWER 22 OF 25 REGISTRY COPYRIGHT 2013 ACS
 RN 115826-30-7 REGISTRY
 CN L-Histidine, L-serylglycyl-L-.alpha.-glutamyl-L-tryptophyl-L-valyl-L-methionyl-L-lysyl-L-.alpha.-glutamyl-L-seryl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-threonyl-L-cysteinyll-L-cysteinyll-L-prolyll-L-seryll-L-threonyll-L-prolyll-L-tyrosyl-L-leucyl-L-.alpha.-aspartyl-L-isoleucyl-L-threonyll-L-tyrosyl- (PCI) (CA INDEX NAME)
 SQL 32
 RN 115826-30-7 REGISTRY
 SQL 32

SEQ 1 SGEWVMKESR GWKHWVFYTC CPSTFYLDIT YH

HITS AT: 12-17

REFERENCE 1: 109:106149

L16 ANSWER 23 OF 25 REGISTRY COPYRIGHT 2013 ACS
 RN 115826-29-4 REGISTRY
 CN L-Histidine, L-serylglycyl-L-.alpha.-glutamyl-L-tryptophyl-L-valyl-L-isoleucyl-L-lysyl-L-.alpha.-glutamyl-L-seryll-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl-L-alanyl-L-cysteinyll-L-cysteinyll-L-prolyll-L-seryll-L-threonyll-L-prolyll-L-tyrosyl-L-leucyl-L-.alpha.-aspartyl-L-isoleucyl-L-threonyll-L-tyrosyl- (PCI) (CA INDEX NAME)
 SQL 32
 RN 115826-29-4 REGISTRY
 SQL 32

SEQ 1 SGEWVMKESR GWKHWVFYTC CPSTFYLDIT YH

HITS AT: 12-17

REFERENCE 1: 113:128235

L16 ANSWER 24 OF 25 REGISTRY COPYRIGHT 1993 ACS
 RN 114753-46-7 REGISTRY
 CN L-Alanine, L-lysyl-L-.alpha.-glutamyl-L-seryl-L-arginylglycyl-L-tryptophyl-L-lysyl-L-histidyl-L-tryptophyl-L-valyl-L-phenylalanyl-L-tyrosyl- (9CI)
 (CA INDEX NAME)
 SQL 13
 RN 114753-46-7 REGISTRY
 SQL 13

SEQ 1 KESREKHHWY FYA

=====

HITS AT: 6-11

REFERENCE 1: 113:128235

REFERENCE 2: 113:128235

L16 ANSWER 25 OF 25 REGISTRY COPYRIGHT 1993 ACS
 RN 89808-58-2 REGISTRY
 CN Cyclic(N-methyl-L-alanyl-2-iodo-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-L-tryptophyl) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 1,4,7,10,13,16-Hexaazacyclooctadecane, cyclic peptide deriv.
 CN Cyclic(N-methyl-L-alanyl-2-iodo-L-phenylalanyl-D-tryptophyl-L-lysyl-L-valyl-L-tryptophyl)
 NTE cyclic
 modified

| type | location | description |
|--------------|----------|--------------|
| modification | Ala-1 | - methyl<Me> |
| modification | Phe-2 | - iod<I> |

SQL 6
 RN 89808-58-2 REGISTRY
 SQL 6

SEQ 1 AFWKVV

=====

HITS AT: 1-2, 3-6

REFERENCE 1: 113:128235